

=> d his

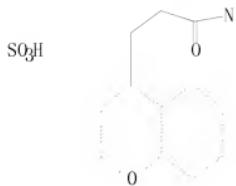
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L1 STRUCTURE uploaded
 L2 2 S L1
 L3 77 S L1 FULL

=> d que 13 stat

L1 STR



Structure attributes must be viewed using STN Express query preparation.

L3 77 SEA FILE=REGISTRY SSS FUL L1

100.0% PROCESSED 202 ITERATIONS
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77 ANSWERS

=> s 13 and caplus/lc
 69677821 CAPLUS/LC
 L4 58 L3 AND CAPLUS/LC

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L5 ANSWER 1 OF 19 REGISTRY COPYRIGHT 2010 ACS on STN

RN 958868-23-0 REGISTRY

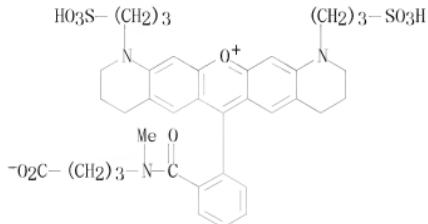
ED Entered STN: 19 Dec 2007

CN Pyrano[3,2-g:5,6-g']diquinolin-13-ium,
6-[2-[(3-carboxypropyl)methylamino]carbonyl]phenyl]-1,2,3,4,8,9,10,11-
octahydro-1,11-bis(3-sulfopropyl)-, inner salt (CA INDEX NAME)

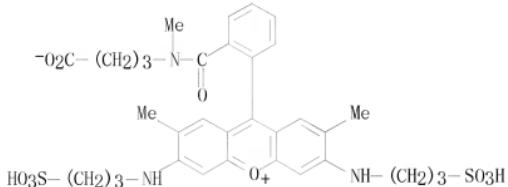
MF C37 H43 N3 O10 S2

CI COM

SR CA



L5 ANSWER 2 OF 19 REGISTRY COPYRIGHT 2010 ACS on STN
RN 958868-17-2 REGISTRY
ED Entered STN: 19 Dec 2007
CN Xanthylium, 9-[2-[[3-(3-carboxypropyl)methylamino]carbonyl]phenyl]-2,7-
dimethyl-3,6-bis[(3-sulfopropyl)amino]-, inner salt (CA INDEX NAME)
MF C33 H39 N3 O10 S2
CI COM
SR CA



L5 ANSWER 3 OF 19 REGISTRY COPYRIGHT 2010 ACS on STN

RN 958868-15-0 REGISTRY

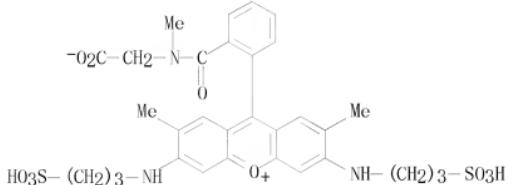
ED Entered STN: 19 Dec 2007

CN Xanthylum, 9-[2-[[(carboxymethyl)methylamino]carbonyl]phenyl]-2,7-dimethyl-3,6-bis[(3-sulfopropyl)amino]-, inner salt (CA INDEX NAME)

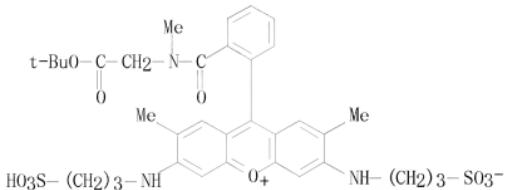
MF C31 H35 N3 O10 S2

CI COM

SR CA



L5 ANSWER 4 OF 19 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 958868-13-8 REGISTRY
 ED Entered STN: 19 Dec 2007
 CN Xanthylium, 9-[2-[[2-(1,1-dimethylethoxy)-2-oxoethyl]methylamino]carbonyl]phenyl]-2,7-dimethyl-3,6-bis[(3-sulfopropyl)amino]-, inner salt (CA INDEX NAME)
 MF C35 H43 N3 O10 S2
 CI COM
 SR CA



L5 ANSWER 5 OF 19 REGISTRY COPYRIGHT 2010 ACS on STN

RN 792904-77-9 REGISTRY

ED Entered STN: 06 Dec 2004

CN Benzoazolium, 2-[2-[[3-[6-[[2-[[2-(6-hydroxy-2,4,5,7-tetraido-3-oxo-3H-xanthen-9-yl)-5-sulfonyl]amino]ethyl]amino]-6-oxohexyl]-5-phenyl-2(3H)-benzoazolylidene]methyl]-1-butenyl-5-phenyl-3-(2-sulfoethyl)-, inner salt (CA INDEX NAME)

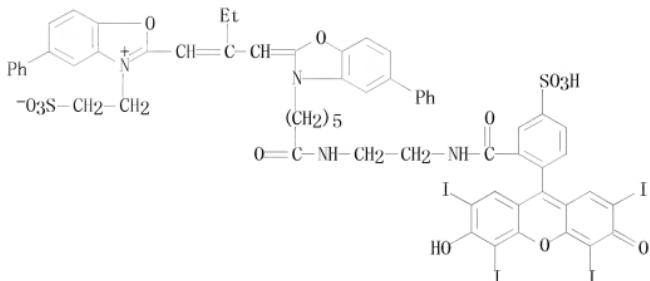
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CN Benzoazolium, 2-[2-[[3-[6-[[2-[(6-hydroxy-2,4,5,7-tetraido-3-oxo-3H-xanthen-9-yl)-5-sulfonyl]amino]ethyl]amino]-6-oxohexyl]-5-phenyl-2(3H)-benzoazolylidene]methyl]-1-butenyl-5-phenyl-3-(2-sulfoethyl)-, inner salt (9C1)

MF C61 H50 I4 N4 O13 S2

CI COM

SR CA



L5 ANSWER 6 OF 19 REGISTRY COPYRIGHT 2010 ACS on STN

RN 790656-76-7 REGISTRY

ED Entered STN: 30 Nov 2004

CN Benzoazolium, 2-[2-[3-[6-oxo-6-[[2-[[5-sulfo-2-(2,4,5,7-tetrabromo-6-hydroxy-3-oxo-3H-xanthan-9-yl)benzoyl]amino]ethyl]amino]hexyl]-5-phenyl-2(3H)-benzoazolylidene]methyl]-1-butenyl-5-phenyl-3-(2-sulfoethyl)-, inner salt (CA INDEX NAME)

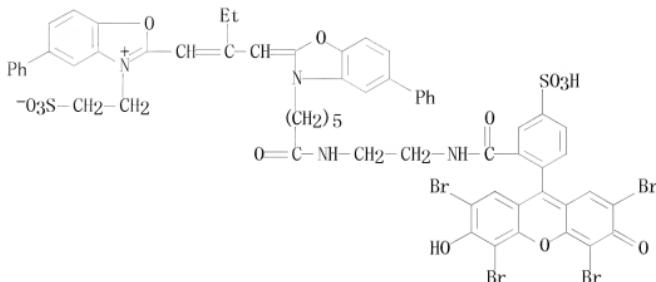
OTHER CA INDEX NAMES:

CN Benzoazolium, 2-[2-[3-[6-oxo-6-[[2-[[5-sulfo-2-(2,4,5,7-tetrabromo-6-hydroxy-3-oxo-3H-xanthan-9-yl)benzoyl]amino]ethyl]amino]hexyl]-5-phenyl-2(3H)-benzoazolylidene]methyl]-1-butenyl]-5-phenyl-3-(2-sulfoethyl)-, inner salt (9C1)

MF C61 H50 Br4 N4 O13 S2

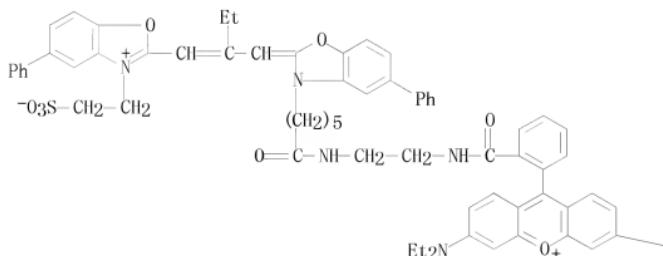
CI COM

SR CA



L5 ANSWER 7 OF 19 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 782447-62-5 REGISTRY
 ED Entered STN: 16 Nov 2004
 CN Benzoazolium, 2-[2-[[3-[6-[[2-[2-[3,6-bis(diethylamino)xanthyl]imino]hexyl]amino]hexyl]amino]hexyl]benzyl-5-phenyl-2(3H)-benzoazolylidene]methyl]-1-butenyl-5-phenyl-3-(2-sulfoethyl)-, inner salt (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Benzoazolium, 2-[2-[[3-[6-[[2-[2-[3,6-bis(diethylamino)xanthyl]imino]hexyl]amino]hexyl]amino]hexyl]benzyl-5-phenyl-2(3H)-benzoazolylidene]methyl]-1-butenyl-5-phenyl-3-(2-sulfoethyl)-, mono(inner salt) (9CI)
 MF C69 H73 N6 O8 S
 CI COM
 SR CA

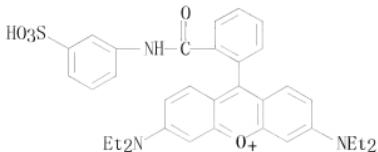
PAGE 1-A



PAGE 1-B

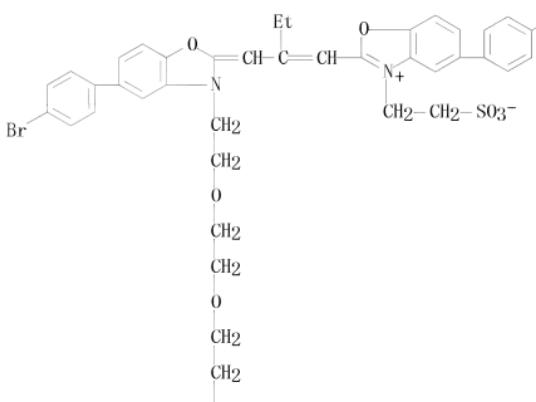
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L5 ANSWER 8 OF 19 REGISTRY COPYRIGHT 2010 ACS on STN
RN 773032-51-2 REGISTRY
ED Entered STN: 31 Oct 2004
CN Xanthylium, 3,6-bis(diethylamino)-9-[2-[[[(3-
sulfophenyl)amino]carbonyl]phenyl]- (CA INDEX NAME)
MF C34 H36 N3 05 S
CI COM
SR CA

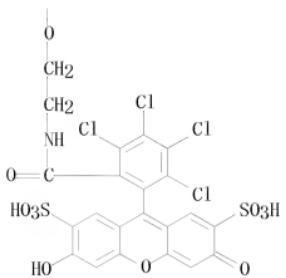


L5 ANSWER 9 OF 19 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 768357-90-0 REGISTRY
 ED Entered STN: 25 Oct 2004
 CN Benzoazolium, 5-(4-bromophenyl)-2-[[5-(4-bromophenyl)-3-[13-oxo-13-[2, 3, 4, 5-tetrachloro-6-(6-hydroxy-3-oxo-2, 7-disulfo-3H-xanthen-9-yl)phenyl]-3, 6, 9-trioxa-12-azatridec-1-yl]-2(3H)-benzoazolylidene]methyl]-1-buten-1-yl]-3-(2-sulfoethyl)-, inner salt (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Benzoazolium, 5-(4-bromophenyl)-2-[[5-(4-bromophenyl)-3-[13-oxo-13-[2, 3, 4, 5-tetrachloro-6-(6-hydroxy-3-oxo-2, 7-disulfo-3H-xanthen-9-yl)phenyl]-3, 6, 9-trioxa-12-azatridec-1-yl]-2(3H)-benzoazolylidene]methyl]-1-butenyl]-3-(2-sulfoethyl)-, inner salt (9CI)
 MF C61 H49 Br2 Cl4 N3 O18 S3
 CI COM
 SR CA

PAGE 1-A



PAGE 2-A



L5 ANSWER 10 OF 19 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 758683-35-1 REGISTRY
 ED Entered STN: 08 Oct 2004
 CN Benzoazolium, 2-[2-[[3-[13-[2-[3,6-bis(diethylamino)xanthyl]imino]phenyl]-13-oxo-3,6,9-trioxa-12-azatridec-1-yl]-2(3H)-benzothiazolylidene]methyl]-1-butenyl]-5-phenyl-3-(3-sulfopropyl)-, inner salt (CA INDEX NAME)

OTHER CA INDEX NAMES:

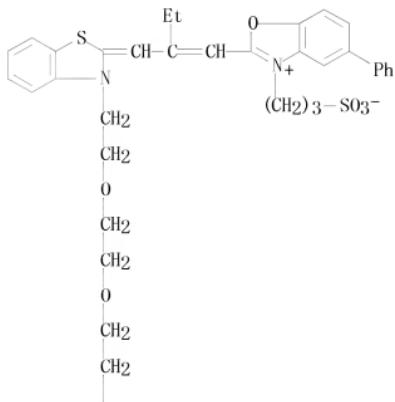
CN Benzoazolium, 2-[2-[[3-[13-[2-[3,6-bis(diethylamino)xanthyl]imino]phenyl]-13-oxo-3,6,9-trioxa-12-azatridec-1-yl]-2(3H)-benzothiazolylidene]methyl]-1-butenyl]-5-phenyl-3-(3-sulfopropyl)-, mono(inner salt) (9CI)

MF C64 H72 N5 O9 S2

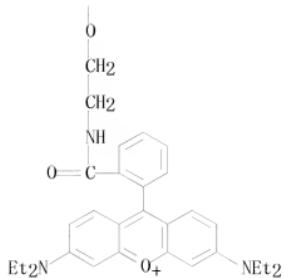
CI COM

SR CA

PAGE 1-A



PAGE 2-A



L5 ANSWER 11 OF 19 REGISTRY COPYRIGHT 2010 ACS on STN

RN 757939-74-5 REGISTRY

ED Entered STN: 07 Oct 2004

CN Benzoazolium, 2-[2-[[3-[6-[[2-[3,6-bis(ethylamino)-2,7-dimethylxanthyl]amino]ethyl]amino]-6-oxohexyl]-5-phenyl-2(3H)-benzoazolylidene]methyl]-1-buten-1-yl]-5-phenyl-3-(2-sulfoethyl)-, inner salt (CA INDEX NAME)

OTHER CA INDEX NAMES:

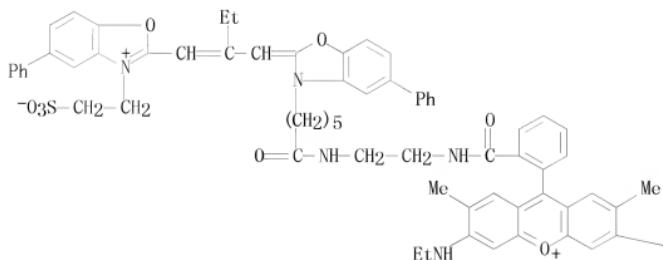
CN Benzoazolium, 2-[2-[[3-[6-[[2-[3,6-bis(ethylamino)-2,7-dimethylxanthyl]amino]ethyl]amino]-6-oxohexyl]-5-phenyl-2(3H)-benzoazolylidene]methyl]-1-butenyl]-5-phenyl-3-(2-sulfoethyl)-, mono(inner salt) (9CI)

MF C67 H69 N6 O8 S

CI COM

SR CA

PAGE 1-A



PAGE 1-B

-NHEt

L5 ANSWER 12 OF 19 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 741247-75-6 REGISTRY
 ED Entered STN: 08 Sep 2004
 CN Benzoazolium, 2-[2-[3-[6-oxo-6-[[2-[2,3,4,5-tetrachloro-6-(2,4,5,7-tetrabromo-6-hydroxy-3-oxo-3H-xanthen-9-yl)benzoyl]amino]ethyl]amino]hexyl]-5-phenyl-2(3H)-benzoazolylidene]methyl]-1-butenyl-1-yl]-5-phenyl-3-(2-sulfoethyl)-, inner salt (CA INDEX NAME)

OTHER CA INDEX NAMES:

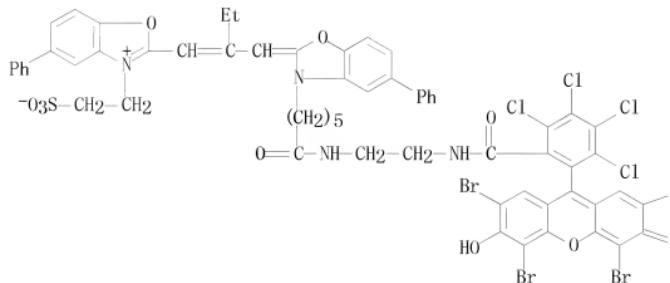
CN Benzoazolium, 2-[2-[3-[6-oxo-6-[[2-[2,3,4,5-tetrachloro-6-(2,4,5,7-tetrabromo-6-hydroxy-3-oxo-3H-xanthen-9-yl)benzoyl]amino]ethyl]amino]hexyl]-5-phenyl-2(3H)-benzoazolylidene]methyl]-1-butenyl]-5-phenyl-3-(2-sulfoethyl)-, inner salt (9CI)

MF C61 H46 Br4 Cl4 N4 O10 S

CI COM

SR CA

PAGE 1-A



PAGE 1-B

-Br

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L5 ANSWER 13 OF 19 REGISTRY COPYRIGHT 2010 ACS on STN

RN 730241-66-4 REGISTRY

ED Entered STN: 22 Aug 2004

CN Benzoazolium, 5-(4-bromophenyl)-2-[2-[[5-(4-bromophenyl)-3-[6-[[3-[[2-(6-hydroxy-2,4,5,7-tetraiodo-3-oxo-3H-xanthen-9-yl)benzoyl]amino]propyl]amino]-6-oxohexyl]-2(3H)-benzoxazolylidene]methyl]-1-butenyl-1-yl]-3-(2-sulfoethyl)-, inner salt (CA INDEX NAME)

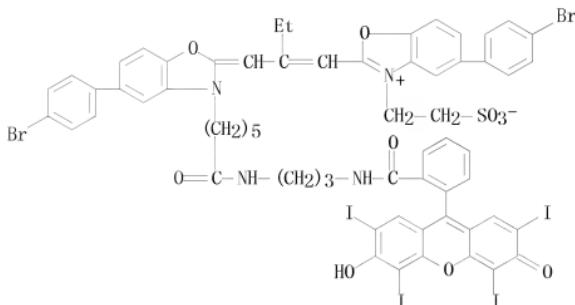
OTHER CA INDEX NAMES:

CN Benzoazolium, 5-(4-bromophenyl)-2-[2-[[5-(4-bromophenyl)-3-[6-[[3-[[2-(6-hydroxy-2,4,5,7-tetraiodo-3-oxo-3H-xanthen-9-yl)benzoyl]amino]propyl]amino]-6-oxohexyl]-2(3H)-benzoxazolylidene]methyl]-1-butenyl]-3-(2-sulfoethyl)-, inner salt (9CI)

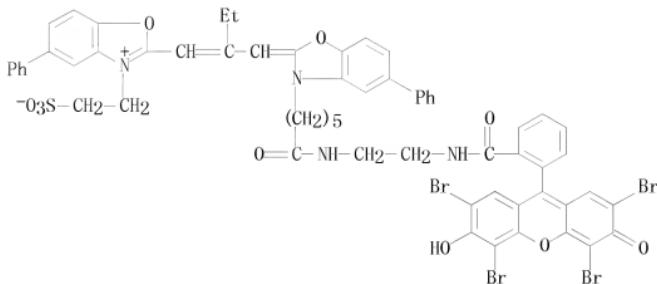
MF C62 H50 Br2 I4 N4 O10 S

CI COM

SR CA



L5 ANSWER 14 OF 19 REGISTRY COPYRIGHT 2010 ACS on STN
 RN 726697-05-8 REGISTRY
 ED Entered STN: 13 Aug 2004
 CN Benzoazolium, 2-[2-[[3-[6-oxo-6-[[2-[[2-(2,4,5,7-tetrabromo-6-hydroxy-3-oxo-3H-xanthen-9-yl)benzoyl]amino]ethyl]amino]hexyl]-5-phenyl-2(3H)-benzoazolylidene]methyl]-1-butenyl]-5-phenyl-3-(2-sulfoethyl)-, inner salt (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Benzoazolium, 2-[2-[[3-[6-oxo-6-[[2-[[2-(2,4,5,7-tetrabromo-6-hydroxy-3-oxo-3H-xanthen-9-yl)benzoyl]amino]ethyl]amino]hexyl]-5-phenyl-2(3H)-benzoazolylidene]methyl]-1-butenyl]-5-phenyl-3-(2-sulfoethyl)-, inner salt (9C1)
 MF C61 H50 Br4 N4 O10 S
 CI COM
 SR CA



L5 ANSWER 15 OF 19 REGISTRY COPYRIGHT 2010 ACS on STN
RN 715654-23-2 REGISTRY

ED Entered STN: 23 Jul 2004

CN Benzoxazolium, 2-[2-[3-[

2,4,5,7-tetraiodo-3-oxo-3H-xanthen-9-yl)phenyl]-3,6,9-trioxa-12-azatridec-1-yl]-2(3H)-benzothiazolylidene[methyl]-1-buten-1-yl]-5-phenyl-3-(3-sulforpropyl)-, inner salt (CA INDEX NAME)

OTHER CA INDEX NAMES:

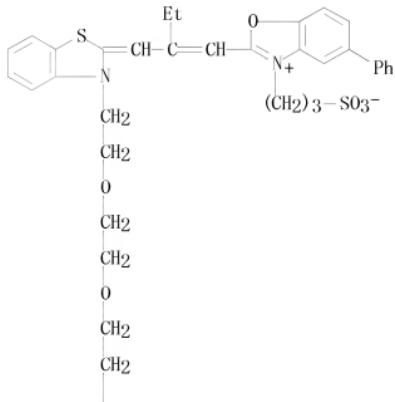
CN Benzoazolium, 2-[2-[3-[13-oxo-13-[2,3,4,5-tetrachloro-6-(6-hydroxy-2,4,5,7-tetraido-3-oxo-3H-xanthen-9-yl)phenyl]-3,6,9-trioxa-12-azatridec-1-yl]-2(3H)-benzothiazolylidene]methyl]-1-but enyl]-5-phenyl-3-(3-sulfopropyl)-, inner salt (9CI)

MF C56 H45 C14 I4 N3 O11 S2

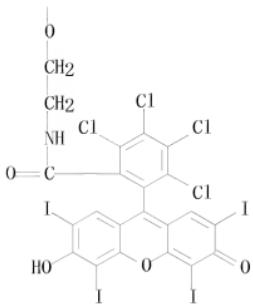
CI COM

SR CA

PAGE 1-A



PAGE 2-A



L5 ANSWER 16 OF 19 REGISTRY COPYRIGHT 2010 ACS on STN

RN 198821-70-4 REGISTRY

ED Entered STN: 19 Dec 1997

CN Xanthylium, 9-[2-[(butylamino)carbonyl]phenyl]-3-[(2-chlorophenyl)amino]-6-[(2-methoxy-5-sulfophenyl)amino]-, methyl sulfate (1:1) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Xanthylium, 9-[2-[(butylamino)carbonyl]phenyl]-3-[(2-chlorophenyl)amino]-6-[(2-methoxy-5-sulfophenyl)amino]-, methyl sulfate (9CI)

MF C37 H33 Cl N3 O6 S . C H3 O4 S

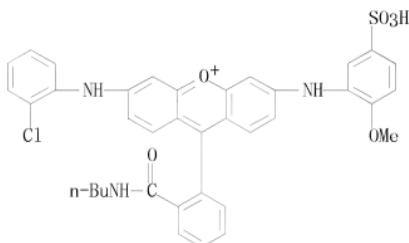
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SR CA

CM 1

CRN 195260-87-8

CMF C37 H33 Cl N3 O6 S



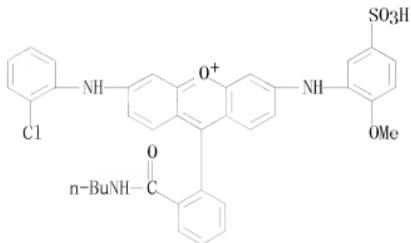
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CRN 21228-90-0

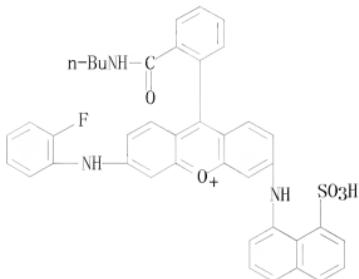
CMF C H3 O4 S

Me-O-SO₃⁻

L5 ANSWER 17 OF 19 REGISTRY COPYRIGHT 2010 ACS on STN
RN 195260-87-8 REGISTRY
ED Entered STN: 10 Oct 1997
CN Xanthylium, 9-[2-[(butylamino)carbonyl]phenyl]-3-[(2-chlorophenyl)amino]-6-
[(2-methoxy-5-sulfophenyl)amino]- (CA INDEX NAME)
MF C37 H33 Cl N3 O6 S
CI COM
SR CA



L5 ANSWER 18 OF 19 REGISTRY COPYRIGHT 2010 ACS on STN
RN 195260-63-0 REGISTRY
ED Entered STN: 10 Oct 1997
CN Xanthylium, 9-[2-[(butylamino)carbonyl]phenyl]-3-[(2-fluorophenyl)amino]-6-
[(8-sulfo-1-naphthalenyl)amino]- (CA INDEX NAME)
MF C40 H33 F N3 O5 S
CI COM
SR CA



L5 ANSWER 19 OF 19 REGISTRY COPYRIGHT 2010 ACS on STN

RN 192720-28-8 REGISTRY

ED Entered STN: 15 Aug 1997

CN Xanthylium, 9-[2-[(butylamino)carbonyl]phenyl]-3-[(2-carboxyphenyl)amino]-6-[[2-(2-propyn-1-yloxy)-5-sulfophenyl]amino]- (CA INDEX NAME)

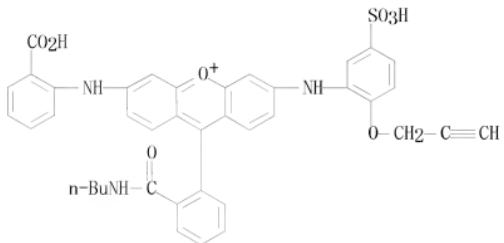
OTHER CA INDEX NAMES:

CN Xanthylium, 9-[2-[(butylamino)carbonyl]phenyl]-3-[(2-carboxyphenyl)amino]-6-[[2-(2-propynyl)oxy]-5-sulfophenyl]amino]- (9CI)

MF C40 H34 N3 O8 S

CI COM

SR CA



=> fil cap1
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FILE LAST UPDATED: 3 Jan 2010 (20100103/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2009

Cplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

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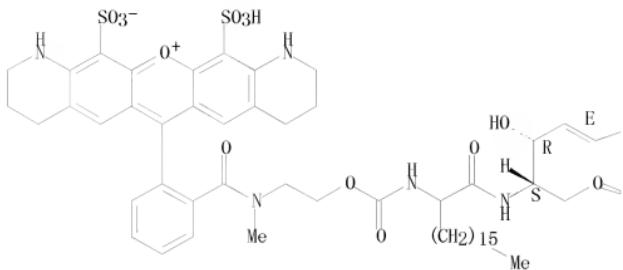
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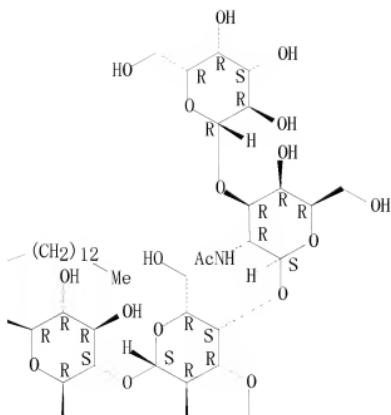
L6 ANSWER 1 OF 15 CAPLUS COPYRIGHT 2010 ACS on STN
AN 2009:1260869 CAPLUS
TI New GM1 Ganglioside Derivatives for Selective Single and Double Labelling
of the Natural Glycosphingolipid Skeleton
AU Polyakova, Svetlana M.; Belov, Vladimir N.; Yan, Sergey F.; Eggeling,
Christian; Ringemann, Christian; Schwarzmann, Guenter; de Meijere, Armin;
Hell, Stefan W.
CS Department of NanoBiophotonics, Max Planck Institute for Biophysical
Chemistry, Goettingen, 37077, Germany
SO European Journal of Organic Chemistry (2009), (30), 5162-5177,
S5162/1-S5162/6
CODEN: EJOCFK; ISSN: 1434-193X
PB Wiley-VCH Verlag GmbH & Co. KGaA
DT Journal
LA English
AB Selective single and double labeling of the natural ganglioside GM1
enables one to introduce various markers into different parts of the
glycosphingolipid mol. without changing the natural skeleton. To that
end, N-Fmoc-2-amino-, N-Fmoc-18-amino- and
S-(ethoxothiocarbonyl)-18-mercaptopstearic acids have been prepared and
coupled with the primary amino group in the sphingosine part of lyso-GM1
and deAc-deAcyl-GM1 gangliosides. The products of these coupling
reactions may be used for the synthesis of GM1 derivs. with one or two
fluorescent dye moieties or other labels of various polarities. Examples
of various labeling strategies, using hydrophilic and lipophilic
photostable fluorescent dyes, have been made available. The GM1 derivs.
labeled with the fluorescent dye ATTO 647N or a doubly labeled derivative can
be used as probes in fluorescence correlation spectroscopy (in
conventional microscopy or stimulated emission depletion nanoscopy) to
study the diffusion of lipid analogs in model or live cell membranes.
(.COPYRGT. Wiley-VCH Verlag GmbH & Co. KGaA, 69451 Weinheim, Germany,
2009).
IT 1199580-29-4P 1199580-91-0P
RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); PRP
(Properties); SPN (Synthetic preparation); ANST (Analytical study); BIOL
(Biological study); PREP (Preparation); USES (Uses)
 (new GM1 ganglioside derivs. for selective single and double labeling
 of natural glycosphingolipid skeleton)
RN 1199580-29-4 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.
Double bond geometry as shown.

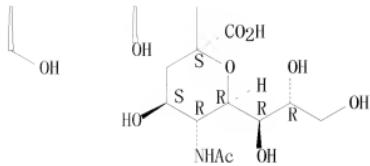
PAGE 1-A



PAGE 1-B



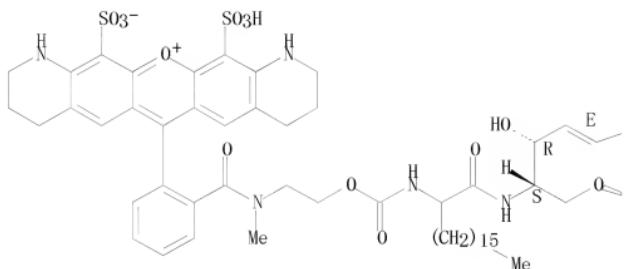
PAGE 2-B



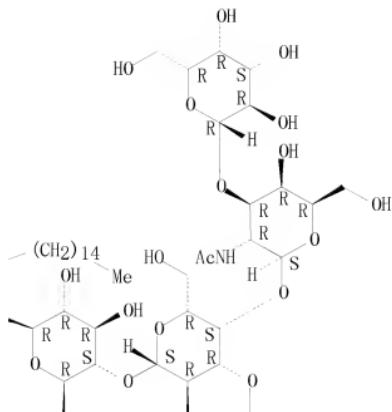
RN 1199580-91-0 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.
 Double bond geometry as shown.

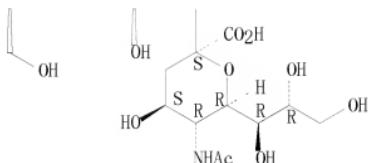
PAGE 1-A



PAGE 1-B



PAGE 2-B



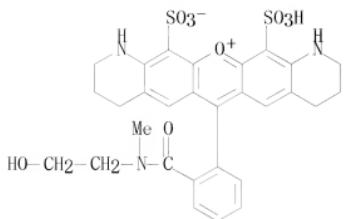
IT 1032434-41-5 1032434-42-6

RL: RCT (Reactant); RACT (Reactant or reagent)

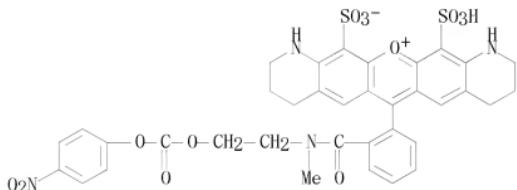
(new GM1 ganglioside derivs. for selective single and double labeling
of natural glycosphingolipid skeleton)

RN 1032434-41-5 CAPLUS

CN Pyrano[3,2-g:5,6-g']diquinolin-13-ium,
1,2,3,4,8,9,10,11-octahydro-6-[2-[(2-
hydroxyethyl)methylamino]carbonyl]phenyl]-12,14-disulfo-, inner salt (CA
INDEX NAME)



RN 1032434-42-6 CAPLUS

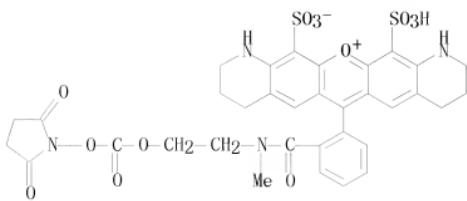
CN Pyrano[3,2-g:5,6-g']diquinolin-13-i um,
1, 2, 3, 4, 8, 9, 10, 11-octahydro-6-[2-[[methyl[2-[[[(4-
nitrophenoxy)carbonyl]oxy]ethyl]amino]carbonyl]phenyl]-12, 14-disulfo-,
inner salt (CA INDEX NAME)

IT 1032434-43-7P 1032434-47-1P 1199580-20-5P

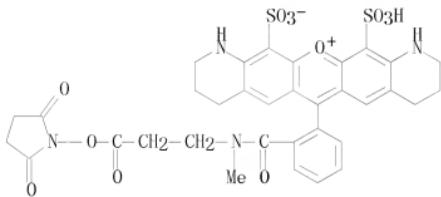
1199580-22-7P
1199580-49-8PRL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)(new GM1 ganglioside derivs. for selective single and double labeling
of natural glycosphingolipid skeleton)

RN 1032434-43-7 CAPLUS

CN Pyrano[3,2-g:5,6-g']diquinolin-13-i um,
6-[2-[[2-[[[(2, 5-dioxo-1-
pyrrolidinyl)oxylcarbonyl]oxy]ethyl]methylamino]carbonyl]phenyl]-
1, 2, 3, 4, 8, 9, 10, 11-octahydro-12, 14-disulfo-, inner salt (CA INDEX NAME)

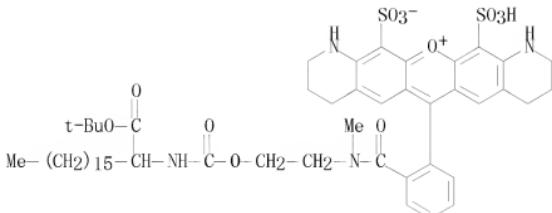


RN 1032434-47-1 CAPLUS

CN Pyrano[3, 2-g:5, 6-g']diquinolin-13-ium,
6-[2-[[3-[2, 5-dioxo-1-pyrrolidinyl]oxy]-3-
oxopropyl]methylamino]carbonylphenyl]-1, 2, 3, 4, 8, 9, 10, 11-octahydro-12, 14-
disulfo-, inner salt (CA INDEX NAME)

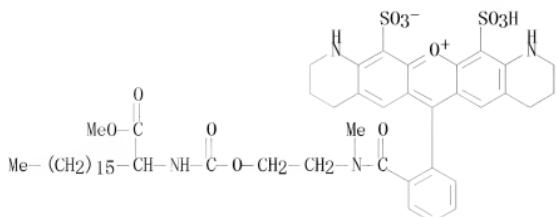
RN 1199580-20-5 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

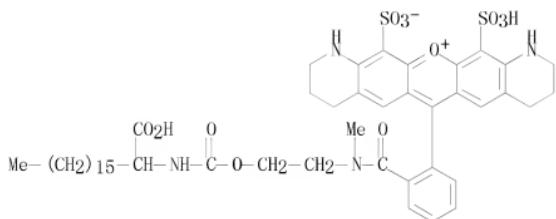


RN 1199580-22-7 CAPLUS

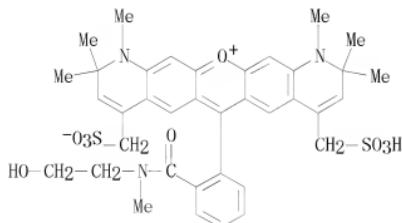
CN INDEX NAME NOT YET ASSIGNED



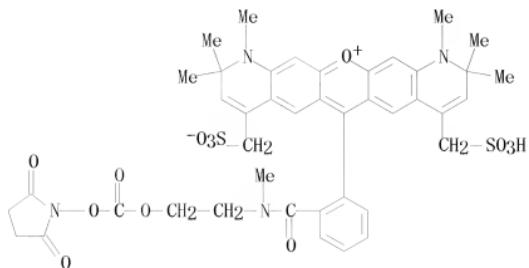
RN 1199580-23-8 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED



RN 1199580-48-7 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED



RN 1199580-49-8 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED



RE. CNT 6

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

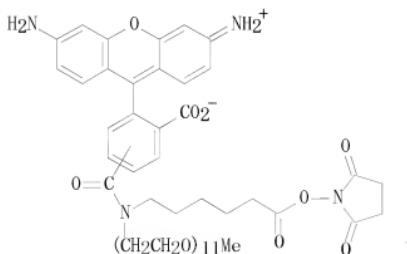
L6 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2010 ACS on STN
 AN 2009:767810 CAPLUS
 DN 151:96479
 TI Fluorescent compounds for labeling biomolecules and cells and use in kits and assays

IN Mao, Fei; Leung, Wai-Yee; Cheung, Ching-Ying; Hoover, Hye Eun
 PA Biotium, Inc., USA
 SO PCT Int. Appl., 157pp.
 CODEN: PIXXD2

DT Patent
 LA English

FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2009078970	A1	20090625	WO 2008-US13698	20081212
	W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	US 20090305410	A1	20091210	US 2008-334387	20081212
PRAI	US 2007-13956P	P	20071214		
OS	MARPAT 151:96479				
GI					



AB The present invention relates to fluorescent dyes in general. The present invention provides a wide range of fluorescent dyes and kits containing the same, which are applicable for labeling a variety of biomols., cells and microorganisms. The present invention also provides various methods of using the fluorescent dyes for research and development, forensic identification, environmental studies, diagnosis, prognosis, and/or

treatment of disease conditions. Fluorescent dye I (preparation given) was conjugated with goat anti-mouse IgG and with aminophalloidin. Actin filaments were stained with phalloidin labeled with I. I conjugate was more photostable than a conjugate with Alex Fluor 488.

IT 1164239-41-1

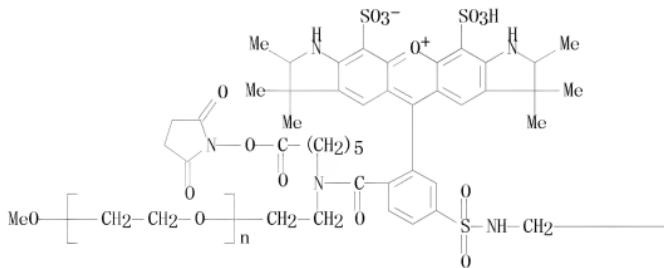
RL: ARG (Analytical reagent use); PRPH (Prophetic); ANST (Analytical study); USES (Uses)

(as fluorescent xanthene dye; fluorescent compds. for labeling biomols. and cells and use in kits and assays)

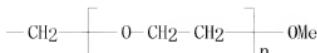
RN 1164239-41-1 CAPLUS

CN Poly(oxy-1,2-ethanediyl), α -hydro- ω -methoxy-, ether with 5-[2-[[6-[2,5-dioxo-1-pyrrolidinyl]oxy]-6-oxohexyl](2-hydroxyethyl)amino]carbonyl]-5-[[2-hydroxyethyl]amino]sulfonyl]phenyl]-1,2,3,7,8,9-hexahydro-2,3,3,7,7,8-hexamethyl-10,12-disulfonyprano[3,2-f:5,6-f']diindol-11-ium inner salt (2:1) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



RE. CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2010 ACS on STN
 AN 2009:422071 CAPLUS
 DN 150:425027
 TI Amide-substituted fluorescent xanthene dyes
 IN Lukhtanov, Eugene
 PA Epoch Biosciences, Inc., USA
 SO PCT Int. Appl., 84pp.
 CODEN: PIXXD2

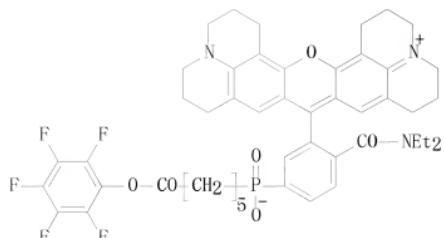
DT Patent
 LA English
 FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2009046165	A1	20090409	WO 2008-US78540	20081002
	W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	US 20090093612	A1	20090409	US 2008-244712	20081002
PRAI	US 2007-977316P	P	20071003		

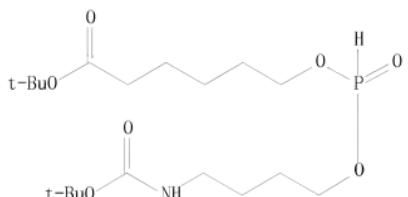
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS MARPAT 150:425027

GI



I



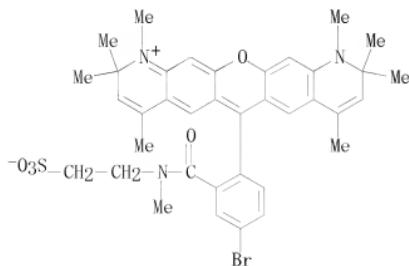
II

AB Amide-substituted xanthene fluorescent dyes such as I can be prepared from xanthene dyes using a phosphorylation agent (II). Thus, I was prepared by mixing 0.85 g a Br-substituted xanthene dye, 2.2 mL DMF, 1 mL N-ethylmorpholine and 1.27 g II and heating 3 h at 70° in the presence of 0.12 g tetrakis(triphenylphosphine)palladium followed by treating with pentafluorophenyl trifluoroacetate and reacting with diethylamine.

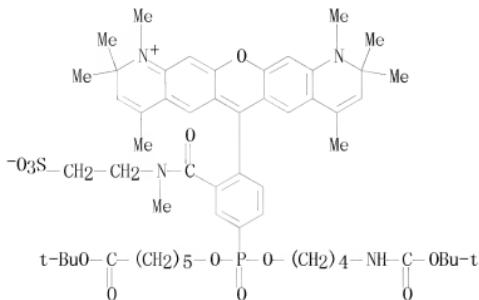
IT 1140967-15-2P 1140967-16-3P
 RL: IMF (Industrial manufacture); PRPH (Prophetic); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (amide-substituted fluorescent xanthene dyes)

RN 1140967-15-2 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

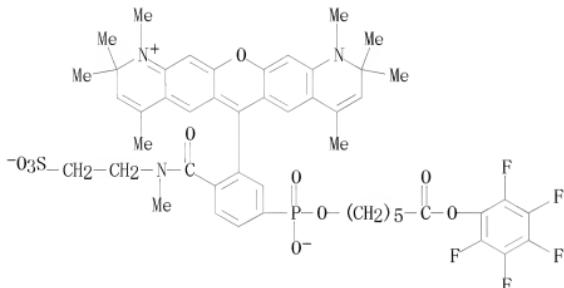


RN 1140967-16-3 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED



IT 1140967-10-7P
 RL: IMF (Industrial manufacture); PRPH (Prophetic); PREP (Preparation)
 (dye; amide-substituted fluorescent xanthene dyes)

RN 1140967-10-7 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED



RE. CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2010 ACS on STN
 AN 2008:505287 CAPLUS
 DN 148:466517

TI Latent fluorescent probes containing fluorophore and associated fluorescence quencher and method for detection of biological matter on surgical instruments

IN Baxter, Robert Laurence; Jones, Anita Claire; Baxter, Helen Cochrane; Richardson, Patricia Rose; Grant, Keith James; Halouani, Hatem

PA The University of Edinburgh, UK

SO PCT Int. Appl., 54 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2008047129	A2	20080424	WO 2007-GB3978	20071018
	WO 2008047129	A3	20081127		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, IIR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
	RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA			

PRAI GB 2006-20710 A 20061018

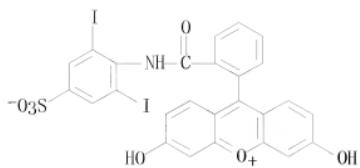
AB Compds. for use as latent fluorescent probes, and methods for the detection of biol. matter on surgical instruments, and for the detection of analytes, is described. The compds. comprise a fluorophore, and an associated fluorescence quencher which inhibits the normal fluorescence of the fluorophore until certain conditions are fulfilled, which conditions may include contact of the compound with a biol. material including substances capable of reacting with one or more functionalities of the compound

IT 1020201-00-6P

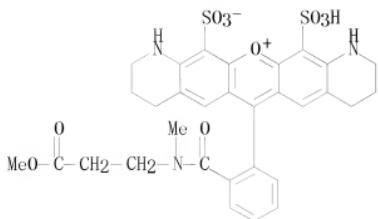
RL: ARG (Analytical reagent use); PRP (Properties); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)
 (latent fluorescent probes containing fluorophore and associated fluorescence quencher and method for detection of biol. matter on surgical instruments)

RN 1020201-00-6 CAPLUS

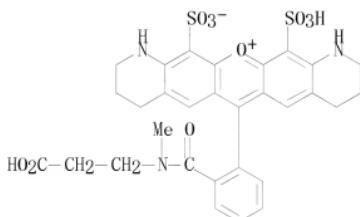
CN Xanthylium, 9-[2-[(2,6-diiodo-4-sulfophenyl)amino]carbonyl]phenyl]-3,6-dihydroxy-, inner salt (CA INDEX NAME)



L6 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2010 ACS on STN
 AN 2008:486445 CAPLUS
 DN 149:55630
 TI Photostable, amino reactive and water-soluble fluorescent labels based on sulfonated rhodamine with a rigidized xanthene fragment
 AU Boyarskiy, Vadim P.; Belov, Vladimir N.; Medda, Rebecca; Hein, Birka; Bossi, Mariano; Hell, Stefan W.
 CS Department of NanoBiophotonics, Max Planck Institute for Biophysical Chemistry, Goettingen, 37077, Germany
 SO Chemistry--A European Journal (2008), 14(6), 1784-1792
 CODEN: CEJED; ISSN: 0947-6539
 PB Wiley-VCH Verlag GmbH & Co. KGaA
 DT Journal
 LA English
 OS CASREACT 149:55630
 AB Highly water soluble fluorescent dyes were synthesized and transformed into new amino reactive fluorescent labels for biol. microscopy. To this end, a rhodamine was sulfonated with 30% SO₃ in H₂SO₄ and afforded the water-soluble disulfonic acid. Amidation of the carboxy group in this compound with 2-(methylamino)ethanol in the presence of O-(7-azabenzotriazol-1-yl)-N,N,N',N'-tetramethyluronium hexafluorophosphate led to an alc., which was transformed into an amino reactive mixed carbonate with di(N-succinimidyl)carbonate and Et₃N. Reaction of the carboxy group in the original disulfonic acid with MeNH(CH₂)₂CO₂Me and N,N,N',N'-tetramethyl-O-(N-succinimidyl)-uronium BF₄⁻ yielded the Me ester. After saponification of the aliphatic carboxy group in this Me ester, the compound was converted into an NHS-ester. Heating of tetrahydro-7-quinolinol with trimellitic anhydride in H₃PO₄ gave a 1:1 mixture of rhodamine dicarboxylic acid regioisomers. One of the regioisomers was isolated, sulfonated with 30% SO₃ in H₂SO₄, and the resulting disulfonic acid was used for the synthesis of the mono NHS-ester in which the sterically unhindered carboxy group was selectively activated with N-hydroxysuccinimide. Three of the sulfonated rhodamines are soluble in water (up to 0.1 M) and have excellent photostabilities and large fluorescence quantum yields. Subdiffraction resolution images of tubulin filaments of mammalian cells stained with these dyes illustrate their applicability as labels for stimulated emission depletion microscopy and other fluorescence techniques.
 IT 1032434-44-8P 1032434-46-OP
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (intermediate; preparation of fluorescent labels based on sulfonated rhodamines with rigidized xanthene fragment)
 RN 1032434-44-8 CAPLUS
 CN Pyrano[3,2-g:5,6-g']diquinolin-13-iun, 1,2,3,4,8,9,10,11-octahydro-6-[2-[(3-methoxy-3-oxopropyl)methylamino]carbonyl]phenyl]-12,14-disulfo-, inner salt (CA INDEX NAME)



RN 1032434-46-0 CAPLUS

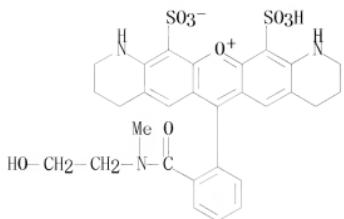
CN Pyrano[3,2-g:5,6-g']diquinolin-13-ium,
6-[2-[(2-carboxyethyl)methylamino]carbonyl]phenyl]-1,2,3,4,8,9,10,11-octahydro-12,14-disulfo-, inner salt (CA INDEX NAME)

IT 1032434-41-5P

RL: BSU (Biological study, unclassified); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(preparation of fluorescent labels based on sulfonated rhodamines with rigidized xanthene fragment)

RN 1032434-41-5 CAPLUS

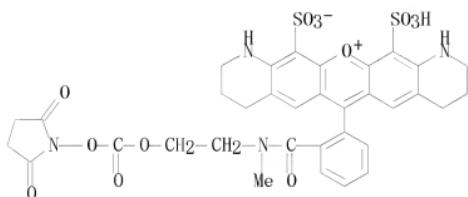
CN Pyrano[3,2-g:5,6-g']diquinolin-13-ium,
1,2,3,4,8,9,10,11-octahydro-6-[2-[(2-hydroxyethyl)methylamino]carbonyl]phenyl]-12,14-disulfo-, inner salt (CA INDEX NAME)



IT 1032434-43-7P 1032434-47-1P
 RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (preparation of fluorescent labels based on sulfonated rhodamines with rigidized xanthene fragment)

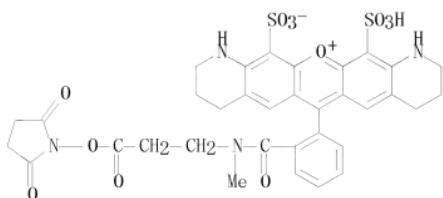
RN 1032434-43-7 CAPLUS

CN Pyrano[3,2-g:5,6-g']dquinolin-13-iium,
 6-[2-[[2-[[2-[[2,5-dioxo-1-
 pyrrolidinyl]oxy]carbonyl]oxy]ethyl]methylamino]carbonyl]phenyl]-
 1,2,3,4,8,9,10,11-octahydro-12,14-disulfo-, inner salt (CA INDEX NAME)



RN 1032434-47-1 CAPLUS

CN Pyrano[3,2-g:5,6-g']dquinolin-13-iium,
 6-[2-[[3-[(2,5-dioxo-1-pyrrolidinyl)oxy]-3-
 oxopropyl]methylamino]carbonyl]phenyl]-1,2,3,4,8,9,10,11-octahydro-12,14-
 disulfo-, inner salt (CA INDEX NAME)

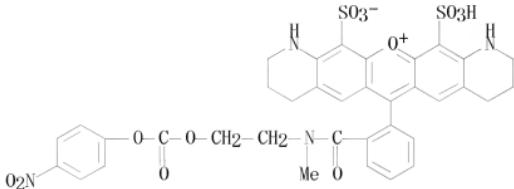


IT 1032434-42-6P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (preparation of fluorescent labels based on sulfonated rhodamines with
 rigidized xanthene fragment)

RN 1032434-42-6 CAPLUS

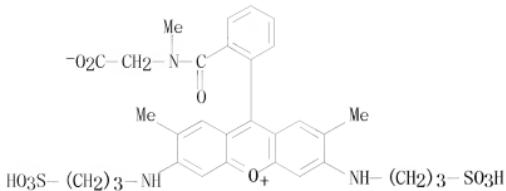
CN Pyrano[3,2-g:5,6-g']diquinolin-13-iun,
 1,2,3,4,8,9,10,11-octahydro-6-[2-[[methy1[2-[[[(4-
 nitrophenoxy)carbonyl]oxy]ethyl]amino]carbonyl]phenyl]-12,14-disulfo-,
 inner salt (CA INDEX NAME)



OSC. G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
 RE. CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2010 ACS on STN
 AN 2007:1364408 CAPLUS
 DN 148:35065
 TI Rhodamine fluorescent dye compounds and the use of their labeled conjugates
 IN Romanov, Nikolai Nikolaevich; Barnes, Colin Lloyd
 PA Solexa Limited, UK
 SO PCT Int. Appl., 102 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007135368	A2	20071129	WO 2007-GB1770	20070516
	WO 2007135368	A3	20080306		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
	EP 2021415	A2	20090211	EP 2007-732794	20070516
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS				
PRAI	US 2006-801270P	P	20060518		
	WO 2007-GB1770	W	20070516		
OS	CASREACT 148:35065; MARPAT 148:35065				
AB	The invention relates to rhodamine dyes particularly suitable for methods of fluorescence detection and sequencing synthesis. The dyes and labeled conjugates are useful as mol. probes in a variety of applications, such as in assays involving staining of cells, protein binding, and anal. of nucleic acids, such as hybridization assays and nucleic acid sequencing. Thus, a rhodamine dye bearing N-propylsulfonic acid ammonium salt was prepared and tested.				
IT	958868-16-1P				
	RL: IMF (Industrial manufacture); PREP (Preparation) (manufacture of rhodamine fluorescent dye compds. and use in biomol. staining or labeling)				
RN	958868-16-1 CAPLUS				
CN	Xanthylum, 9-[2-[(carboxymethyl)methylamino]carbonyl]phenyl]-2,7-dimethyl-3,6-bis[(3-sulforpropyl)amino]-, inner salt, compd. with N,N-diethylethanamine (1:1) (CA INDEX NAME)				
	CM 1				
	CRN 958868-15-0				
	CMF C31 H35 N3 O10 S2				



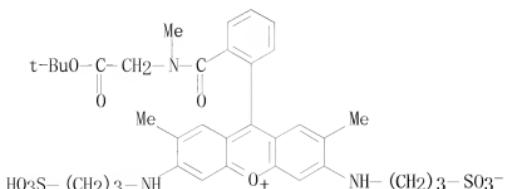
CM 2

CRN 121-44-8
CMF C6 H15 NIT 958868-14-9P 958868-18-3P 958868-24-1P
958868-84-3PRL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(manufacture of rhodamine fluorescent dye compds. and use in biomol. staining or labeling)

RN 958868-14-9 CAPLUS

CN Xanthylum, 9-[2-[[2-(1,1-dimethylethoxy)-2-oxoethyl]methylamino]carbonyl]phenyl]-2,7-dimethyl-3,6-bis[(3-sulfopropyl)amino]-, inner salt, compd. with N,N-diethylethanamine (1:1)
(CA INDEX NAME)

CM 1

CRN 958868-13-8
CMF C35 H43 N3 O10 S2

CM 2

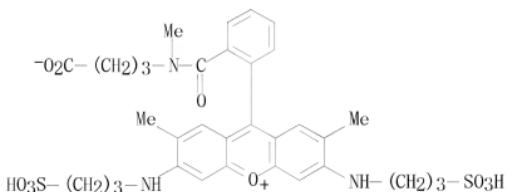
CRN 121-44-8
 CMF C6 H15 N

Et
 Et-N-Et

RN 958868-18-3 CAPLUS
 CN Xanthylium, 9-[2-[[[(3-carboxypropyl)methylamino]carbonyl]phenyl]-2,7-dimethyl-3,6-bis[(3-sulforpropyl)amino]-, inner salt, compd. with N,N-diethylethanamine (1:1) (CA INDEX NAME)

CM 1

CRN 958868-17-2
 CMF C33 H39 N3 O10 S2



CM 2

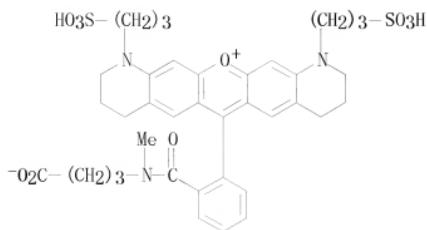
CRN 121-44-8
 CMF C6 H15 N

Et
 Et-N-Et

RN 958868-24-1 CAPLUS
 CN Pyrano[3,2-g:5,6-g']diquinolin-13-ium, 6-[2-[[[(3-carboxypropyl)methylamino]carbonyl]phenyl]-1,2,3,4,8,9,10,11-octahydro-1,11-bis(3-sulforpropyl)-, inner salt, compd. with N,N-diethylethanamine (1:1) (CA INDEX NAME)

CM 1

CRN 958868-23-0
 CMF C37 H43 N3 O10 S2



CM 2

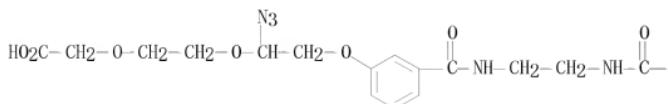
CRN 121-44-8
CMF C6 H15 N

RN 958868-84-3 CAPLUS
 CN Poly(oxy-1,2-ethanediyl), α -[3-[2-[3-[2-azido-2-[2-(carboxymethoxy)ethoxy]ethoxy]benzoyl]amino]ethyl]amino]-3-oxopropyl]- ω -[2-[[4-[2-[3,6-bis(ethylamino)-4,5-disulfoxanthyl]methylamino]-1-oxobutyl]amino]ethoxy]-, inner salt, compd. with N,N-diethylethanamine (1:1) (CA INDEX NAME)

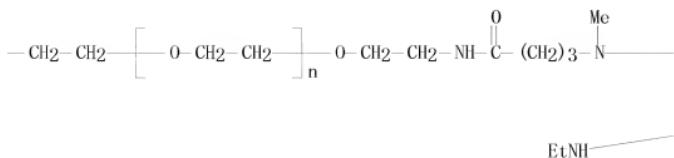
CM 1

CRN 924660-21-9
CMF (C2 H4 O)n C49 H59 N9 O17 S2
CCI PMS

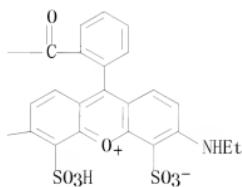
PAGE 1-A



PAGE 1-B



PAGE 1-C



CM 2

CRN 121-44-8
 CMF C6 H15 N

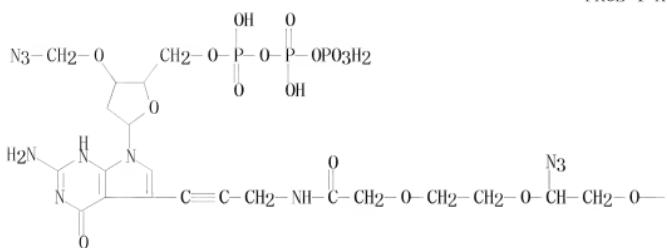


IT 924660-22-0P 958868-83-2P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (probe synthesis; manufacture of rhodamine fluorescent dye compds. and use in biomol. staining or labeling)

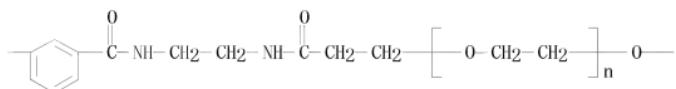
RN 924660-22-0 CAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[3-[[2-[[3-[2-[2-[[3-[2-amino-7-[3-0-(azidomethyl)-2-deoxy-5-0-[hydroxy[[hydroxy(phosphonoxy)phosphiny1]oxy]phosphiny1]- β -D-erythro-pentofturanosyl]-4,7-dihydro-4-oxo-3H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-propyn-1-yl]amino]-2-oxethoxy]ethoxy]-2-azidoethoxy]benzoyl]amino]ethyl]amino]-3-oxopropyl]- ω -[2-[[4-[[2-[3,6-bis(ethylamino)-4,5-disulfoxanthylium-9-yl]benzoyl]methylamino]-1-oxobutyl]amino]ethoxy], inner salt (CA INDEX NAME)

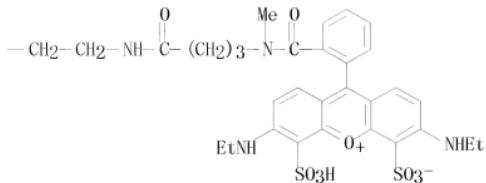
PAGE 1-A



PAGE 1-B



PAGE 1-C



RN 958868-83-2 CAPLUS

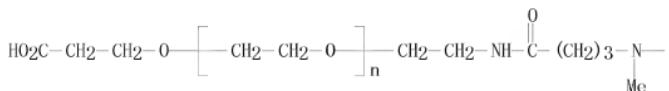
CN Poly(oxy-1,2-ethanediyl), α -[2-[4-[2-[2,7-bis(ethylamino)-1,8-

disulfoxanthylium-9-yl]benzoyl]methylamino]-1-oxobutyl]aminoethyl]-
 ω -(2-carboxyethoxy)-, inner salt, compd. with N,N-diethylethanamine
 (1:1) (CA INDEX NAME)

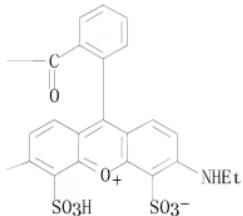
CM 1

CRN 924660-20-8
 CMF (C₂ H₄ O)_n C₃₄ H₄₀ N₄ O₁₂ S₂
 CCI PMS

PAGE 1-A



PAGE 1-B



CM 2

CRN 121-44-8
 CMF C₆ H₁₅ N



IT 958868-75-2P

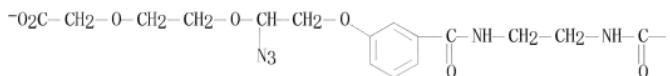
RL: ARG (Analytical reagent use); IMF (Industrial manufacture); ANST
 (Analytical study); PREP (Preparation); USES (Uses)
 (probe; manufacture of rhodamine fluorescent dye compds. and use in biomol.

staining or labeling)

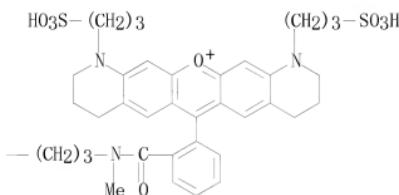
RN 958868-75-2 CAPLUS

CN Pyrano[3, 2-g:5, 6-g']diquinolin-13-ium,
6-[2-[[4-[[2-[[3-[2-azido-2-[2-(carboxymethoxy)ethoxy]ethoxy]benzoyl]amino]ethyl]amino]-4-oxobutyl]methylamino]carbonyl]phenyl]-1, 2, 3, 4, 8, 9, 10, 11-octahydro-1, 11-bis(3-sulfopropyl)-, inner salt (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IT 958868-76-3P

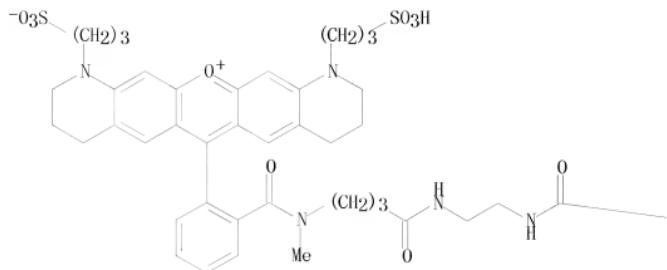
RL: ARU (Analytical role, unclassified); IMF (Industrial manufacture);
ANST (Analytical study); PREP (Preparation)
(probe; manufacture of rhodamine fluorescent dye compds. and use in biomol. staining or labeling)

RN 958868-76-3 CAPLUS

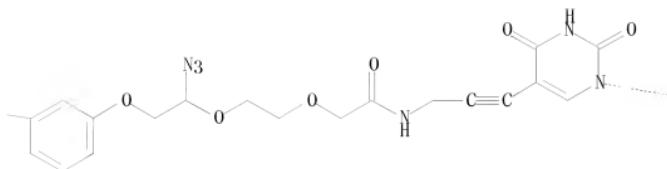
CN Pyrano[3, 2-g:5, 6-g']diquinolin-13-ium,
6-[2-[[4-[[2-[[3-[2-azido-2-[2-[2-[[3-[1-[3-0-(azidomethyl)-2-deoxy-5-O-[hydroxy[[hydroxy(phosphonoxy)phosphoryl]oxy]phosphoryl]-β-D-erythro-pentofuranosyl]-1, 2, 3, 4-tetrahydro-2, 4-dioxo-5-pyrimidinyl]-2-propyn-1-yl]amino]-2-oxoethoxy]ethoxy]ethoxy]benzoyl]amino]ethyl]amino]-4-oxobutyl]methylamino]carbonyl]phenyl]-1, 2, 3, 4, 8, 9, 10, 11-octahydro-1, 11-bis(3-sulfopropyl)-, inner salt (CA INDEX NAME)

Absolute stereochemistry.

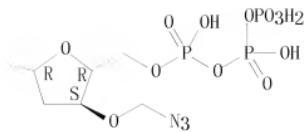
PAGE 1-A



PAGE 1-B



PAGE 1-C



L6 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2010 ACS on STN
 AN 2007:198977 CAPLUS

DN 146:229558

TI Preparation and quenching effect of fluorescent labeled dye-containing modified nucleosides and nucleotides and uses thereof

IN Liu, Xiaohai; Milton, John

PA Solexa Limited, UK

SO PCT Int. Appl., 51pp.

CODEN: PIXXD2

DT Patent

LA English

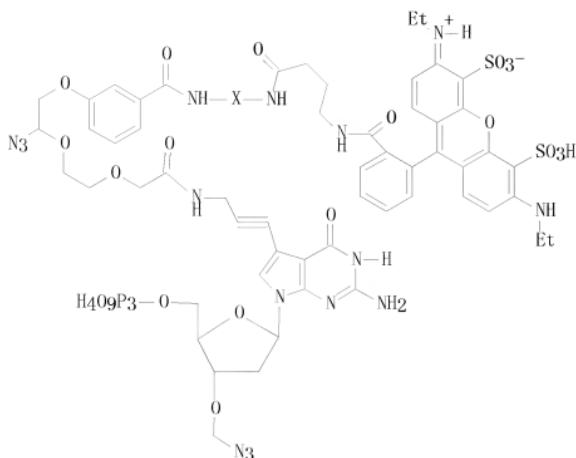
FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007020457	A2	20070222	WO 2006-GB3095	20060818
	WO 2007020457	A3	20071025		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
	US 20070042407	A1	20070222	US 2006-494279	20060727
	US 7592435	B2	20090922		
	EP 1926829	A2	20080604	EP 2006-779167	20060818
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
PRAI	GB 2005-17097	A	20050819		
	WO 2006-GB3095	W	20060818		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS CASREACT 146:229558

GI



AB Modified guanine-containing nucleosides and nucleotides, in particular fluorescent labeled guanine-containing nucleosides and nucleotides, which exhibit reduced quenching effects, and hence enhanced brightness of the fluorophore are described. Thus, nucleotide I [X = $-\text{CH}_2\text{CH}_2\text{NHCOCH}_2\text{CH}_2(0\text{CH}_2\text{CH}_2)110\text{CH}_2\text{CH}_2-$] was prepared and tested for incorporation into a polynucleotide by phosphodiester linkage of each resp. nucleotide to the 3' end of a DNA strand, the precise sequence of which is not of relevance. The fluorescent intensity of the dye in each of the modified nucleotides was then measured, both before and after treatment with tris(2-carboxethyl)phosphine.

IT treatment w/ 924660-22-0P

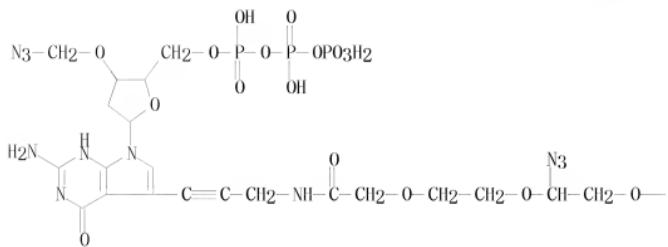
: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and quenching effect of fluorescing labeled dye-containing modified
nucleosides and nucleotides and uses thereof)

RN 924660-22-0 CAPIUS

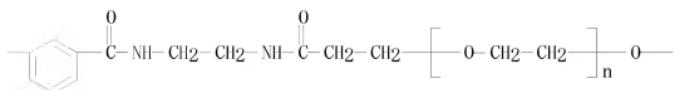
CN Poly(oxy-1, 2-ethanediyl), α -[3-[2-[3-[2-[2-[2-[3-[2-amino-7-[3-

[azidomethyl]-2-deoxy-5-[hydroxy[[hydroxy(phosphonoxy)phosphinyl]oxyl]phosphinyl]- β -D-erythro-pento[furanyl]-4,7-dihydro-4-oxo-3H-pyrrol[2,3-d]pyrimidin-5-yl]-2-propyn-1-yl]amino]-2-oxoethoxy]ethoxy]-2-azidoethoxy[benzoyl]aminoethylamino]-3-oxopropyl]- ω -[2-[[4-[[2-[3,6-bis(ethylamino)-4,5-disulfoxanthyl]ium-9-yl]benzoyl]methylamino]-1-oxobutyl]amino]ethoxy]-, inner salt (CA INDEX NAME)

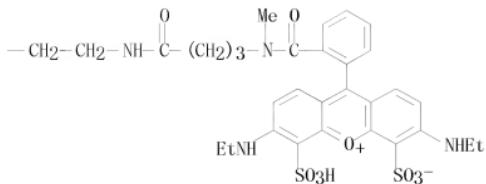
PAGE 1-A



PAGE 1-B



PAGE 1-C

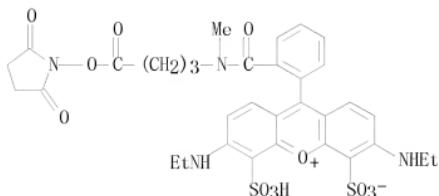


RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation and quenching effect of fluorescent labeled dye-containing modified nucleosides and nucleotides and uses thereof)

RN 924660-19-5 CAPLUS

CN Xanthylium, 9-[2-[[4-[(2,5-dioxo-1-pyrrolidinyl)oxy]-4-oxobutyl]methylamino]carbonylphenyl]-3,6-bis(ethylamino)-4,5-disulfo-, inner salt (CA INDEX NAME)



IT 924660-20-8P 924660-21-9P

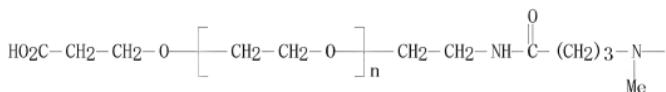
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and quenching effect of fluorescent labeled dye-containing modified nucleosides and nucleotides and uses thereof)

RN 924660-20-8 CAPLUS

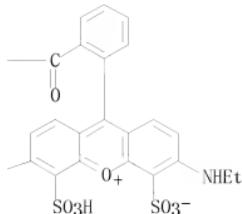
CN Poly(oxy-1, 2-ethanediyl), ω -[2-[[4-[2-[3, 6-bis(ethylamino)-4, 5-disulfoxanthylum-9-yl]benzoyl]methylamino]-1-oxobutyl]amino]ethyl]- ω -(2-carboxyethoxy)-, inner salt (CA INDEX NAME)

PAGE 1-A



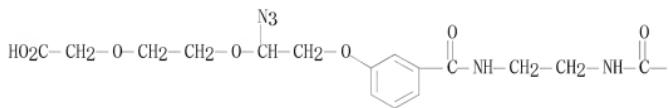
EtNH⁺

PAGE 1-B

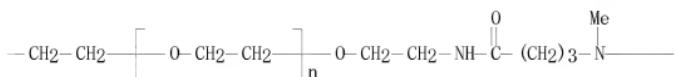


RN 924660-21-9 CAPLUS
 CN Poly(oxy-1, 2-ethanediyl), α -[3-[[2-[[3-[2-azido-2-[2-(carboxymethoxy)ethoxy]benzoyl]amino]ethyl]amino]-3-oxopropyl]- ω -[2-[[4-[2-[3, 6-bis(ethylamino)-4, 5-disulfoxanthylium-9-yl]benzoyl]methylamino]-1-oxobutyl]amino]ethoxy]-, inner salt (CA INDEX NAME)

PAGE 1-A

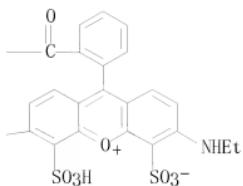


PAGE 1-B



EtNH-

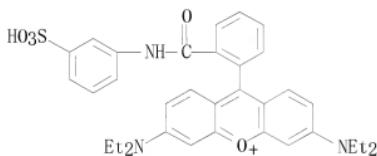
PAGE 1-C



OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L6 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2010 ACS on STN
 AN 2007:117852 CAPLUS
 DN 146:212209
 TI Hair dye composition for dyeing of keratin fibers comprising an
 amidoxanthene direct dye
 IN Lagrange, Alain
 PA L'Oreal, Fr.
 SO Fr. Demande, 74pp.
 CODEN: FRXXBL
 DT Patent
 LA French
 FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2889060	A1	20070202	FR 2005-52408	20050801
	FR 2889060	B1	20090515		
PRAI	FR 2005-52408		20050801		
OS	MARPAT 146:212209				
AB	A hair dye composition for dyeing of keratinous fibers, in particular of human keratinous fibers and, more particularly hair, contains an amidoxanthene direct dye. A hair dye composition contained [6-[bis-(2-hydroxy-ethyl)-amino]-9-(2--dipropylcarbamoyl-phenyl)-xanthen-3-ylidene]-bis-(2-hydroxy-ethyl)- ammonium 0.125, alkyl polyglucoside 3, PEG-8 6, benzyl alc. 4, hydroxyethyl cellulose 0.72, buffer pH = 9.50, and water q. s. 100 g. The composition gives a strong red color to the hair.				
IT	173423-39-7				
	RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)				
	(hair dye composition for dyeing keratin fibers comprising amidoxanthene direct dye)				
RN	173423-39-7 CAPLUS				
CN	Xanthylium, 3,6-bis(diethylamino)-9-[2-[[3-sulfophenyl]amino]carbonyl]phenyl]-, chloride (1:1) (CA INDEX NAME)				



RE. CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2010 ACS on STN
 AN 2005:1004902 CAPLUS

DN 143:262496

TI Specific substrates for 06- alkylguanine-DNA alkyltransferase
 IN Jaccard, Hughes; Johnsson, Kai; Kindermann, Maik; Sielaff, India Christina
 PA EPFL Ecole Polytechnique Federale De Lausanne, Switz.
 SO PCT Int. Appl., 78 pp.
 CODEN: PIIXD2

DT Patent

LA English

FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005085470	A1	20050915	WO 2005-EP50900	20050301
	WO 2005085470	A9	20061005		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1571224	A1	20050907	EP 2004-405124	20040302
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
	EP 1730298	A1	20061213	EP 2005-716866	20050301
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
	JP 2007526282	T	20070913	JP 2007-501285	20050301
	US 20070243568	A1	20071018	US 2006-591162	20061003
PRAI	EP 2004-405124	A	20040302		
	WO 2005-EP50900	W	20050301		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS MARPAT 143:262496

AB The invention relates to substrates for 06-alkylguanine-DNA alkyltransferases (AGT) of formula R1-A-X-CH2-R3-R4-L1 (A = a group recognized by AGT as a substrate; X = O, S; R1 = -R2-L2, R5; R2, R4 = linker; R3 = aromatic or heteroarom. group, (substituted) unsatd, alkyl, cycloalkyl or heterocyclyl group with the double bond connected to CH2; R5 = arylmethyl, heteroaryl methyl, (substituted) cycloalkyl, cycloalkenyl or heterocyclyl group; L1 = label, plurality of same or different labels, bond connecting R4 to A forming a cyclic substrate, further group -R3-CH2-X-A-R1; L2 = label, plurality of same or different labels). The invention further relates to methods of transferring a label from these substrates to AGT and AGT fusion proteins.

IT 1026870-98-3 1067188-77-5 1067188-95-7

RL: PRPH (Prophetic)

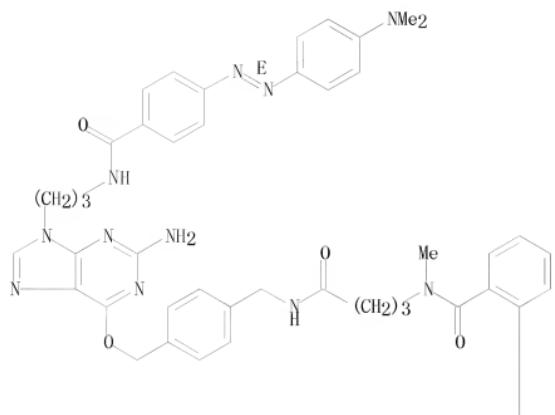
(Specific substrates for 06- alkylguanine-DNA alkyltransferase)

RN 1026870-98-3 CAPLUS

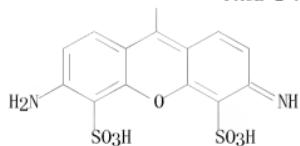
CN INDEX NAME NOT YET ASSIGNED

Double bond geometry as shown.

PAGE 1-A

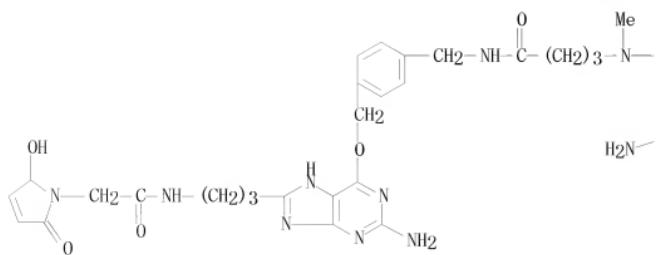


PAGE 2-A

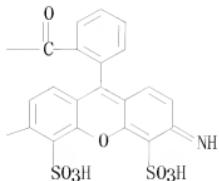


RN 1067188-77-5 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED

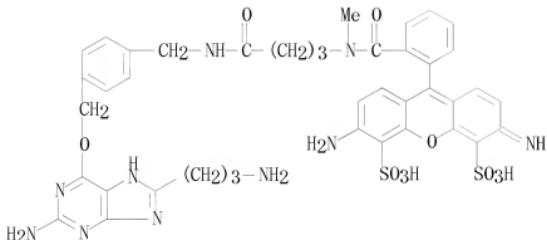
PAGE 1-A



PAGE 1-B



RN 1067188-95-7 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED

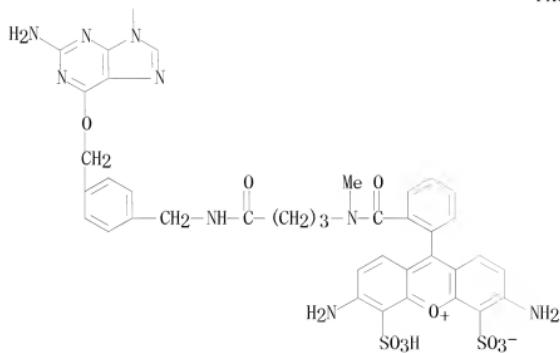


IT 863772-06-9P 863772-14-9P 863772-20-7P
 RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)
 (specific substrates for 06- alkylguanine-DNA alkyltransferase)
 RN 863772-06-9 CAPLUS
 CN Xanthylium, 3,6-diamino-9-[2-[[4-[[4-[[2-amino-9-[3-[[4-[2-[4-(dimethylamino)phenyl]diazenyl]benzoyl]amino]propyl]-9H-purin-6-yl]oxy]methyl]phenyl]methyl]amino]-4-oxobutyl]methylamino]carbonyl]phenyl]-4,5-disulfo-, inner salt (CA INDEX NAME)

PAGE 1-A

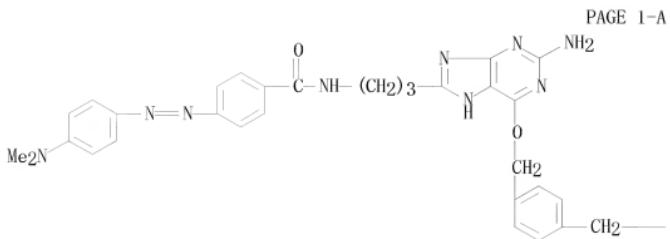


PAGE 2-A

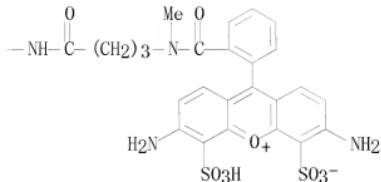


RN 863772-14-9 CAPLUS

CN Xanthylium, 3,6-diamino-9-[2-[[4-[[4-[[2-amino-8-[3-[[4-[2-[4-(dimethylamino)phenyl]diazenyl]benzoyl]amino]propyl]-9H-purin-6-yl]oxy]methyl]phenyl]methyl]amino]-4-oxobutyl]methylamino]carbonyl]phenyl]-4,5-disulfo-, inner salt (CA INDEX NAME)



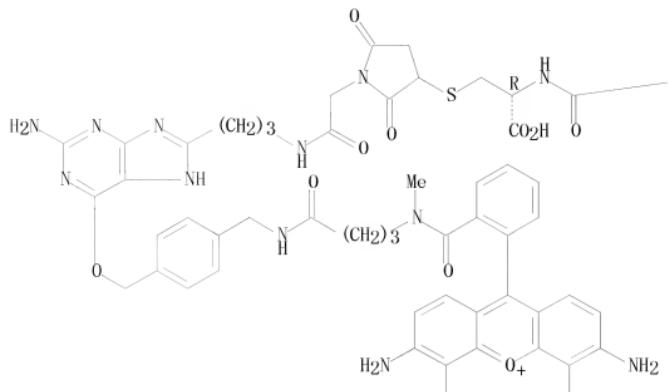
PAGE 1-B



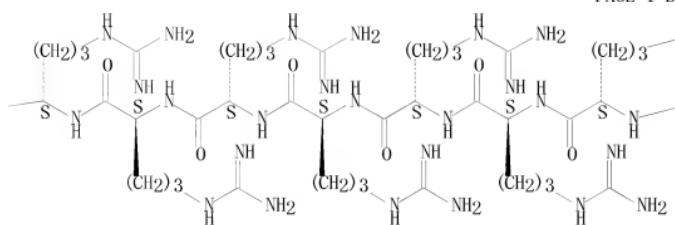
RN 863772-20-7 CAPLUS
CN L-Cysteine, L-tyrosyl-L-arginyl-L-arginyl-L-arginyl-L-arginyl-L-arginyl-L-
arginyl-L-arginyl-L-arginyl-L-arginyl-S-[1-[2-[3-[2-amino-6-[[4-[[(2-[
(3,6-diamino-4,5-disulfoxanthylium-9-yl)benzoyl)methylamino]-1-
oxobutyl]amino]methyl]phenyl]methoxy]-1H-purin-8-yl]propyl]amino]-2-
oxoethyl]-2,5-dioxo-3-pyrrolidinyl]-, inner salt (9C1) (CA INDEX NAME)

Absolute stereochemistry.

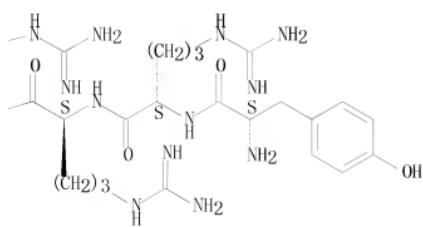
PAGE 1-A



PAGE 1-B



PAGE 1-C



PAGE 2-A

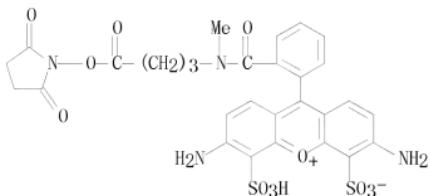


IT 863772-22-9 863772-24-1

RL: RCT (Reactant); RACT (Reactant or reagent)
(specific substrates for 06- alkylguanine-DNA alkyltransferase)

RN 863772-22-9 CAPLUS

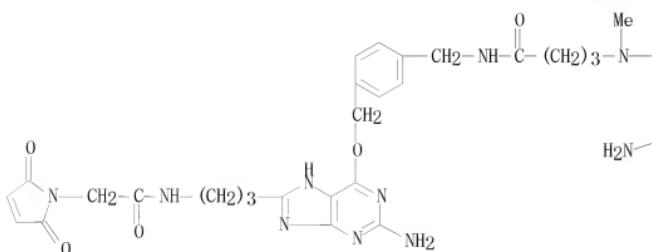
CN Xanthylium, 3,6-diamino-9-[2-[[[4-[[(2,5-dioxo-1-pyrrolidinyl)oxy]-4-oxobutyl]methylamino]carbonyl]phenyl]-4-, 5-disulfo-, inner salt (CA INDEX NAME)



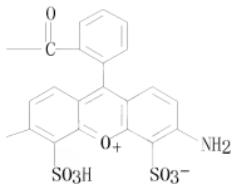
RN 863772-24-1 CAPLUS

CN Xanthylium, 3,6-diamino-9-[2-[[[4-[[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)acetyl]amino]propyl]-9H-purin-6-yl]oxy]methyl]phenyl]methyl]amino]-4-oxobutyl]methylamino]carbonyl]phenyl]-4,5-disulfo-, inner salt (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



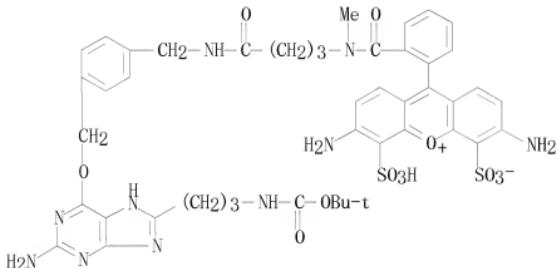
IT 863772-19-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(specific substrates for 06- alkylguanine-DNA alkyltransferase)

RN 863772-19-4 CAPLUS

CN Xanthylum, 3,6-diamino-9-[2-[[4-[[4-[[2-amino-8-[3-[[1,1-dimethylethoxy]carbonyl]amino]propyl]-9H-purin-6-yl]oxy]methyl]phenyl]methyl]amino]-4-oxobutyl]methylamino]carbonyl]phenyl]-4,5-disulfo-, inner salt (CA INDEX NAME)

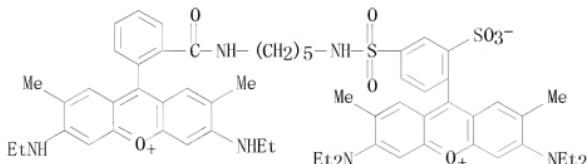


OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
 RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2010 ACS on STN
 AN 2005:921498 CAPLUS
 DN 143:362484
 TI Clear Evidence of Fluorescence Resonance Energy Transfer in Gas-Phase Ions
 AU Dashtiev, Maxim; Azov, Vladimir; Frankevich, Vladimir; Scharfenberg, Ludwig; Zenobi, Renato
 CS Department of Chemistry and Applied Biosciences, Swiss Federal Institute of Technology, ETH Hoenggerberg, Zurich, CH-8093, Switz.
 SO Journal of the American Society for Mass Spectrometry (2005), 16(9), 1481-1487
 CODEN: JAMSEF; ISSN: 1044-0305
 PB Elsevier Inc.
 DT Journal
 LA English
 AB Fluorescence resonance energy transfer (FRET) is a distance-sensitive method that correlates changes in fluorescence intensity with conformational changes, for example, of biomols. in the cellular environment. Applied to the gas phase in combination with Fourier transform ion cyclotron resonance mass spectrometry, it opens up possibilities to define structural/conformational properties of mol. ions, in the absence of solvent, and without the need for purification of the sample. For successfully observing FRET in the gas phase it is important to find suitable fluorophores. In this study several fluorescent dyes were examined, and the correlation between solution-phase and gas-phase fluorescence data were studied. For the first time, FRET in the gas phase is demonstrated unambiguously.

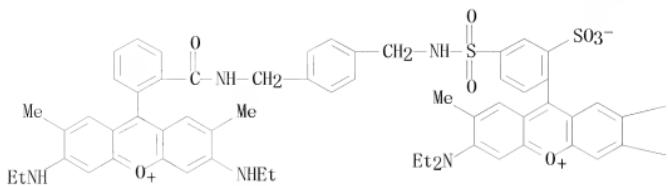
IT 866474-20-6 866474-22-8
 RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)
 (clear evidence of fluorescence resonance energy transfer in gas-phase ions in relation to coupled mass spectrometry and biomol. conformational properties)

RN 866474-20-6 CAPLUS
 CN Xanthylium, 9-[2-[[[[4-[3,6-bis(diethylamino)-2,7-dimethylxanthylium-9-yl]-3-sulfonylphenyl]sulfonyl]amino]pentyl]amino]carbonyl]phenyl]-3,6-bis(ethylamino)-2,7-dimethyl-, inner salt (CA INDEX NAME)



RN 866474-22-8 CAPLUS
 CN Xanthylium, 9-[2-[[[[4-[3,6-bis(diethylamino)-2,7-dimethylxanthylium-9-yl]-3-sulfonylphenyl]sulfonyl]amino]methyl]phenyl]methyl]amino]carbonyl]phenyl]-3,6-bis(ethylamino)-2,7-dimethyl-, inner salt (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

—Me

$$-\text{NEt}_2$$

OSC. G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)
RE. CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2010 ACS on STN
 AN 2003:771718 CAPLUS
 DN 139:299161
 TI Methine dye and silver halide photographic material containing the same to
 improve sensitivity
 IN Takizawa, Hiroo
 PA Fuji Photo Film Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 38 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN. CNT 1
 PATENT NO. KIND DATE APPLICATION NO. DATE

 PI JP 2003280130 A 20031002 JP 2002-81018 20020322
 US 20030198906 A1 20031023 US 2003-391757 20030320
 US 6750003 B2 20040615
 PRAI JP 2002-81018 A 20020322
 ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
 OS MARPAT 139:299161
 GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

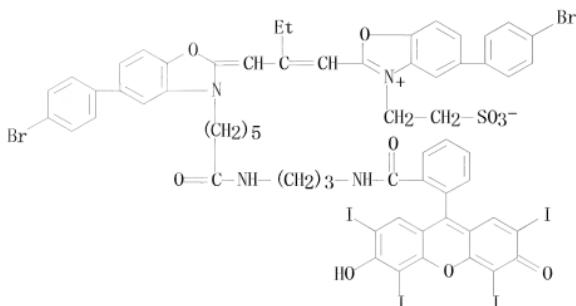
AB The invention relates to a silver halide photog. material containing a methine
 dye represented by I (X3 = 0, S; R11 = OM, SM, NR20R21; R12 = 0, S,
 N+R22R23; M = proton, cation; R20-23 = H, alkyl, alkenyl, aryl,
 heterocyclyl; R13-19 = H, substituent; G1, G2 = alkylene, alkenylene,
 arylene; Al = 0, S, SO2, NR3, COO, CONR4, SO2NR5; R3-5 = H, alkyl,
 alkenyl, aryl, heterocyclyl; t1 = 1-10; X1, X2 = 0, S, NR6, CR7R8; R6-8 =
 H, alkyl, alkenyl, aryl, heterocyclyl; R1, R2 = H, alkyl, alkenyl, aryl,
 heterocyclyl; M1-3 = methine; n1 = 0-3; V1, V2 = substituent; n2, n3 =
 0-4; CI = counter ion; y = number; G1 is connecting to either R1 or V1; G2 is
 connecting to either R11, R12, R13, R14, R15, R16, R17, R18, or R19) in a
 photog. emulsion layer.

IT 608134-88-9 608134-89-0 608134-90-3
 608134-92-5 608134-93-6 608134-94-7
 608134-95-8 608134-96-9 608134-97-0
 608134-98-1 608134-99-2

RL: MOA (Modifier or additive use); USES (Uses)

(new methine spectral sensitizing dye in photog. material to improve
 sensitivity)

RN 608134-88-9 CAPLUS
 CN Benzoxazolium, 5-(4-bromophenyl)-2-[2-[5-(4-bromophenyl)-3-[6-[3-[2-(6-
 hydroxy-2,4,5,7-tetraiodo-3-oxo-3H-xanthen-9-
 yl)benzoyl]amino]propyl]amino]-6-oxohexyl]-2(3H)-benzoxazolylidene]methyl]-
 1-butene-1-yl]-3-(2-sulfoethyl)-, inner salt, sodium salt (1:1) (CA INDEX
 NAME)

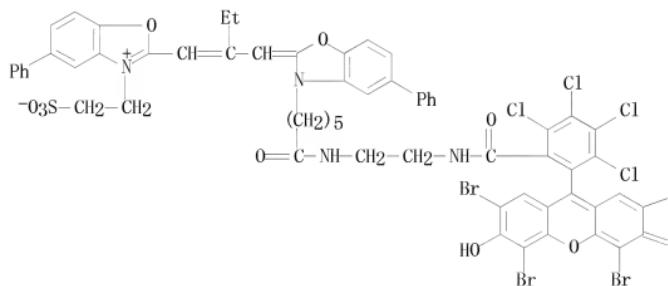


● Na

RN 608134-89-0 CAPLUS

CN Benzoazolium, 2-[2-[3-[6-oxo-6-[2-[2,3,4,5-tetrachloro-6-(2,4,5,7-tetrabromo-6-hydroxy-3-oxo-3H-xanthen-9-yl)benzoyl]amino]ethyl]amino]hexyl]-5-phenyl-2(3H)-benzoazolylidene]methyl]-1-butenyl-5-phenyl-3-(2-sulfoethyl)-, inner salt, sodium salt (1:1) (CA INDEX NAME)

PAGE 1-A



● Na

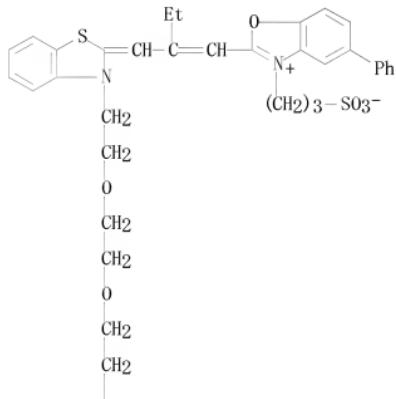
PAGE 1-B

Br

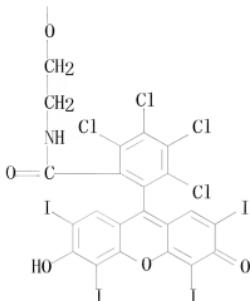
0

RN 608134-90-3 CAPLUS
CN Benzoazolium, 2-[2-[[3-[13-oxo-13-[2,3,4,5-tetrachloro-6-(6-hydroxy-2,4,5,7-tetraiodo-3-oxo-3H-xanthen-9-yl)phenyl]-3,6,9-trioxa-12-azatridec-1-yl]-2(3H)-benzothiazolylidene]methyl]-1-buten-1-yl]-5-phenyl-3-(3-sulfopropyl)-, inner salt, sodium salt (1:1) (CA INDEX NAME)

PAGE 1-A



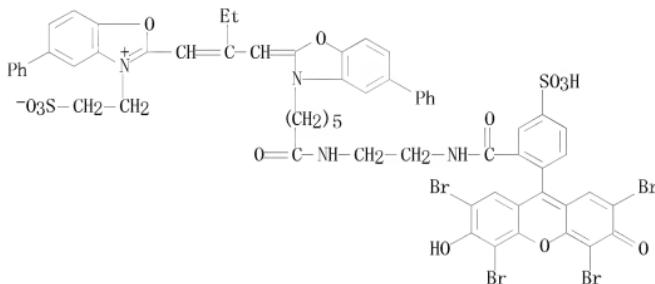
PAGE 2-A



● Na

RN 608134-92-5 CAPLUS

CN Benzoazolium, 2-[2-[[3-[6-oxo-6-[[2-[[5-sulfo-2-(2,4,5,7-tetrabromo-6-hydroxy-3-oxo-3H-xanthen-9-yl)benzoyl]amino]ethyl]amino]hexyl]-5-phenyl-2(3H)-benzoazolylidene]methyl]-1-buten-1-yl]-5-phenyl-3-(2-sulfoethyl)-, inner salt, sodium salt (1:2) (CA INDEX NAME)

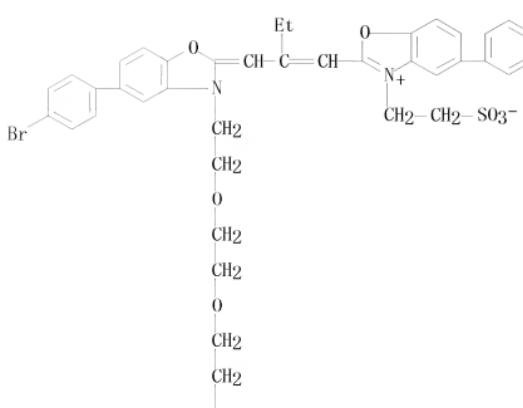


●2 Na

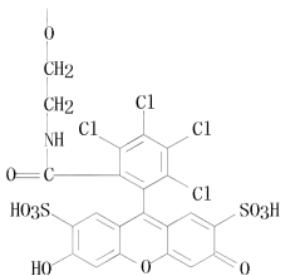
RN 608134-93-6 CAPLUS

CN Benzoazolium, 5-(4-bromophenyl)-2-[2-[[5-(4-bromophenyl)-3-[13-oxo-13-[2,3,4,5-tetrachloro-6-(6-hydroxy-3-oxo-2,7-disulfo-3H-xanthen-9-yl)phenyl]-3,6,9-trioxa-12-azatridec-1-yl]-2(3H)-benzoazolylidene]methyl]-1-buten-1-yl]-3-(2-sulfoethyl)-, inner salt, sodium salt (1:3) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

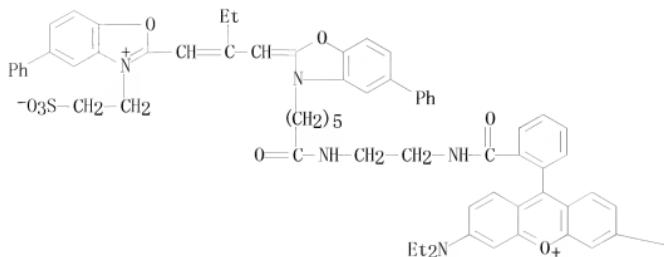


●3 Na

RN 608134-94-7 CAPLUS

CN Benzoazolium, 2-[2-[3-[6-[2-[2-[3,6-bis(diethylamino)xanthyl]9-yl]benzoyl]aminoethyl]amino]-6-oxohexyl]-5-phenyl-2(3H)-benzoazolylidene[methyl]-1-butetyl]-5-phenyl-3-(2-sulfoethyl)-, inner salt, chloride (9CI) (CA INDEX NAME)

PAGE 1-A



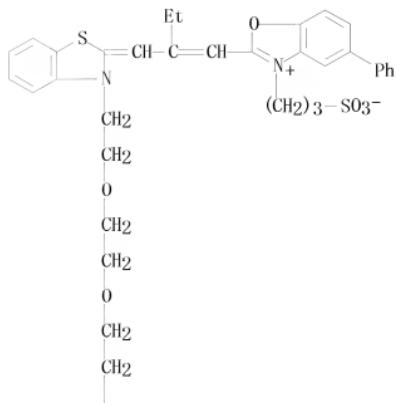
● Cl⁻

PAGE 1-B

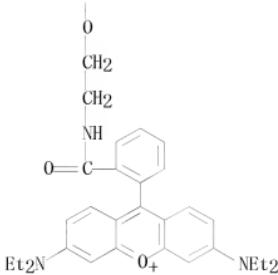
—NEt₂

RN 608134-95-8 CAPLUS
 CN Benzoxazolium, 2-[2-[[3-[13-[2-[3,6-bis(diethylamino)xanthyl]phenyl]-13-oxo-3,6,9-trioxa-12-azatridec-1-yl]-2(3H)-benzothiazolylidene]methyl]-1-butenyl]-5-phenyl-3-(3-sulfopropyl)-, inner salt, chloride (9CI) (CA INDEX NAME)

PAGE 1-A

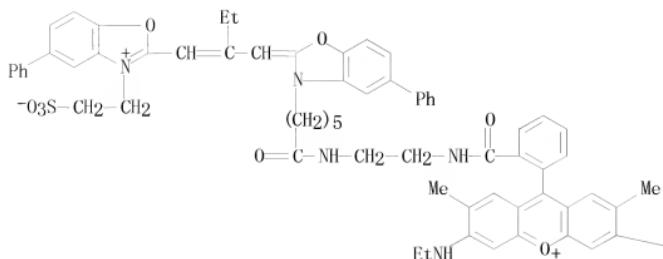


PAGE 2-A

● Cl⁻

RN 608134-96-9 CAPLUS
 CN Benzoxazolium, 2-[2-[[3-[2-[[2-[3,6-bis(ethylamino)-2,7-dimethylxanthyl]benzoyl]amino]ethyl]amino]-6-oxohexyl]-5-phenyl-2(3H)-benzoxazolylidene[methyl]-1-butetyl]-5-phenyl-3-(2-sulfoethyl)-, inner salt, chloride (9CI) (CA INDEX NAME)

PAGE 1-A

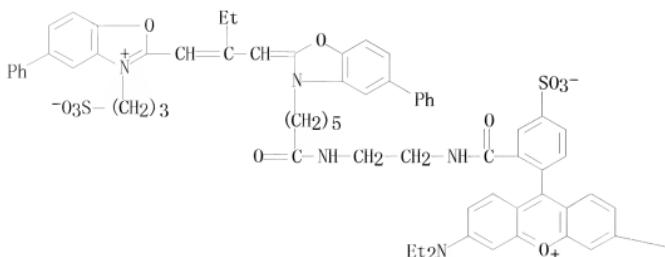
● Cl⁻

PAGE 1-B

—NHET

RN 608134-97-0 CAPLUS
 CN Benzoxazolium, 2-[2-[[3-[6-[[2-[3,6-bis(diethylamino)xanthylium-9-yl]-5-sulfonylbenzoyl]amino]ethyl]amino]-6-oxohexyl]-5-phenyl-2(3H)-benzoxazolylidene]methyl]-1-buten-1-yl]-5-phenyl-3-(3-sulfopropyl)-, bis(inner salt) (CA INDEX NAME)

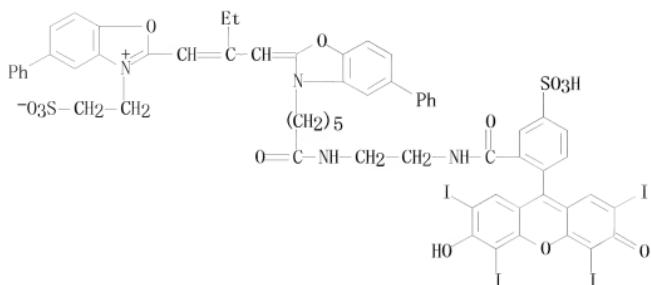
PAGE 1-A



PAGE 1-B

$$-\text{NEt}_2$$

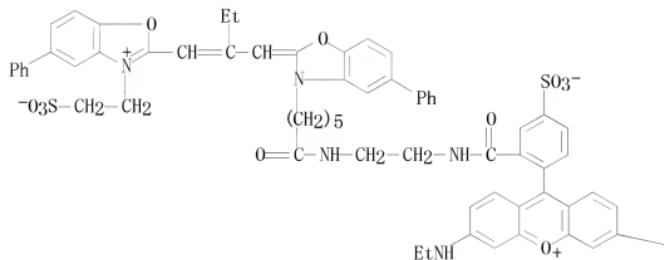
RN 608134-98-1 CAPLUS
CN Benzoxazolium, 2-[2-[[3-[6-[2-[2-(6-hydroxy-2,4,5,7-tetraiodo-3-oxo-3H-xanthen-9-yl)-5-sulfonylbenzoyl]amino]ethyl]amino]-6-oxohexyl]-5-phenyl-2(3H)-benzoxazolylidene]methyl]-1-buten-1-yl]-5-phenyl-3-(2-sulfoethyl)-, inner salt, sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 608134-99-2 CAPLUS
 CN Benzoxazolium, 2-[2-[[3-[6-[[2-[3,6-bis(ethylamino)xanthylum-9-yl]-5-sulfonyl]amino]ethyl]amino]-6-oxohexyl]-5-phenyl-2(3H)-benzoxazolylidene]methyl]-1-buten-1-yl]-5-phenyl-3-(2-sulfoethyl)-, bis(inner salt) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

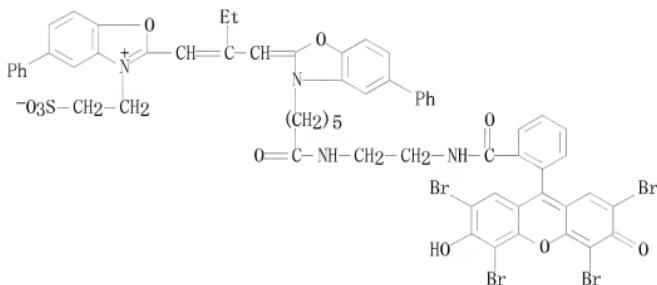
—NHET

IT 608134-87-8P

RL: MOA (Modifier or additive use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
 (preparation of new methine spectral sensitizing dye for photog. material to improve sensitivity)

RN 608134-87-8 CAPLUS

CN Benzoxazolium, 2-[2-[3-[6-oxo-6-[[2-[[2-(2,4,5,7-tetrabromo-6-hydroxy-3-oxo-3H-xanthan-9-yl)benzoyl]amino]ethyl]amino]hexyl]-5-phenyl-2(3H)-benzoxazolylidene]methyl]-1-buten-1-yl]-5-phenyl-3-(2-sulfoethyl)-, inner salt, sodium salt (1:1) (CA INDEX NAME)

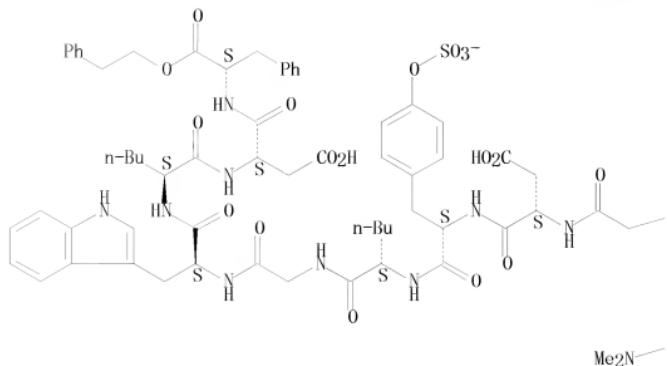


● Na

L6 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2010 ACS on STN
 AN 1999:220855 CAPLUS
 DN 131:951
 TI Regulation of lateral mobility and cellular trafficking of the CCK
 receptor by a partial agonist
 AU Roettger, Belinda F.; Pinon, Delia I.; Burghardt, Thomas P.; Miller,
 Laurence J.
 CS Center for Basic Research in Digestive Diseases and Department of
 Biochemistry and Molecular Biology, Mayo Clinic and Foundation, Rochester,
 MN, 55905, USA
 SO American Journal of Physiology (1999), 276(3, Pt. 1), C539-C547
 CODEN: AJPHAP; ISSN: 0002-9513
 PB American Physiological Society
 DT Journal
 LA English
 AB Partial agonists are effective tools for advancing development of highly
 selective drugs and providing insights into mol. regulation of cellular
 functions. Here, we explore the impact of a partial agonist on key
 aspects of cholecystokinin (CCK) receptor regulation, its lateral mobility
 and cellular trafficking, in native pancreatic acinar cells and Chinese
 hamster ovary cells expressing CCK receptor (CHO-CCKR). We developed and
 characterized a novel fluorescent partial agonist,
 rhodamine-Gly-[Nle28,31]CCK-26-32]-phenethyl ester, that binds
 specifically and with high affinity to CCK receptors. Such analogs are
 fully efficacious pancreatic acinar cell secretagogues without
 supramaximal inhibition that mobilize intracellular calcium with little or
 no increase in phospholipase C (PLC) activity. Despite minimal
 phosphorylation of CCK receptors in response to this partial agonist,
 receptor trafficking was the same as that observed with full agonist (CCK).
 This included normal internalization via clathrin-dependent endocytosis in
 CHO-CCKR cells and insulation on the surface of pancreatic acinar cells.
 Also, as with CCK-occupied receptor, fluorescence recovery after
 photobleaching of partial agonist-occupied receptor on the acinar cell
 surface demonstrated a marked temperature-dependent slowing of its rate of
 diffusion. This was similarly associated with resistance to acid-induced
 dissociation of ligand. Thus some key mol. regulatory mechanisms for CCK
 receptor internalization and insulation may be initiated by cellular
 signaling cascades that are not dependent on PLC activation or receptor
 phosphorylation.
 IT 225644-35-9
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological
 study, unclassified); BIOL (Biological study)
 (cholecystokinin receptor lateral mobility and cellular trafficking
 regulation by partial agonist and mechanisms therein)
 RN 225644-35-9 CAPLUS
 CN L-Phenylalanine, N-[2-[3,6-bis(dimethylamino)xanthyl]imino-9-
 yl]benzoyl]glycyl-L- α -aspartyl-0-sulfo-L-tyrosyl-L-norleucylglycyl-L-
 tryptophyl-L-norleucyl-L- α -aspartyl-, inner salt, 9-(2-phenylethyl)
 ester (9CI) (CA INDEX NAME)

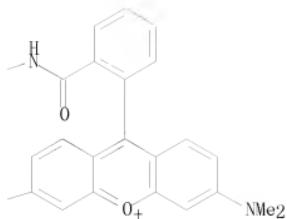
Absolute stereochemistry.

PAGE 1-A



Me2N—

PAGE 1-B



OSC.G 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)
 RE.CNT 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2010 ACS on STN
 AN 1997:617502 CAPLUS
 DN 127:249520
 OREF 127:48749a, 48752a
 TI Ink-jet inks providing lightfast magenta images with good reproducibility
 IN Onodera, Akira; Oya, Hidenobu; Ninomya, Hidetaka; Ishibashi, Daisuke;
 Morimoto, Hitoshi
 PA Konica Co., Japan
 SO Jpn. Kokai Tokkyo Koho, 36 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN. CNT 1

PATENT NO.		KIND	DATE	APPLICATION NO.	DATE
PI	JP 09241558	A	19970916	JP 1996-57369	19960314
PRAI	JP 1996-57369				
OS	MARPAT 127:249520		19960314		
GI					

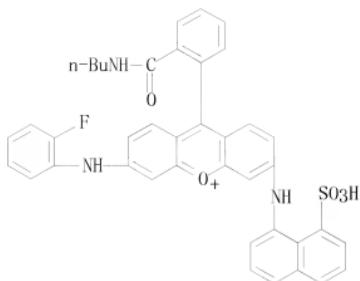
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title inks contain I or II (R1, R2 = H, alkyl, alkenyl, alkynyl, aralkyl; R3, R9 = H, alkyl, alkenyl, alkynyl, aralkyl, aromatic or heterocyclic group, or R3R1, R9R7 = N-heterocycle member; R4, R5, R10, R11 = halogen, alkyl, alkoxy, alkenyloxy, alkynyloxy, aralkyloxy, aromatic oxy, heterocyclic oxy, acylamino, sulfonylamino, ureido, urethane, alkoxy carbonyl, carbamoyl, sulfamoyl, sulfonyl, acyl, amino, cyano, OH, sulfo, carboxy; p, q = 0-4; R6, R12 = sulfo, carboxy, sulfamoyl, carbamoyl, alkoxy carbonyl; A1, A2 = counter ion or none in the case of inner salt; X = Cl, Br, I; R7, R8 = H, alkyl, alkenyl, alkynyl, aralkyl; m = 0-3; n = 0-4), e.g., I (p = q = 0; R1 = R3 = CH₂CO₂H; R2 H; R6 = SO₃⁻).
 IT 195260-64-1 195260-88-9
 RL: TEM (Technical or engineered material use); USES (Uses)
 (dye; ink-jet inks providing lightfast magenta images with good reproducibility)

RN 195260-64-1 CAPLUS
 CN Xanthylium, 9-[2-[(butylamino)carbonyl]phenyl]-3-[(2-fluorophenyl)amino]-6-[(8-sulfo-1-naphthalenyl)amino]-, methyl sulfate (1:1) (CA INDEX NAME)

CM 1

CRN 195260-63-0
 CMF C40 H33 F N3 O5 S



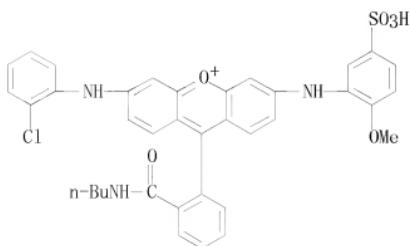
CM 2

CRN 21228-90-0
CMF C H3 04 SMe-O-SO₃⁻RN 195260-88-9 CAPLUS
CN Xanthium, 9-[2-[(butylamino)carbonyl]phenyl]-3-[(2-chlorophenyl)amino]-6-[(2-methoxy-5-sulfophenyl)amino]-, methyl sulfate, sodium salt (1:1:1)
(CA INDEX NAME)

CM 1

CRN 198821-70-4
CMF C37 H33 Cl N3 O6 S . C H3 04 S

CM 2

CRN 195260-87-8
CMF C37 H33 Cl N3 O6 S

CM 3

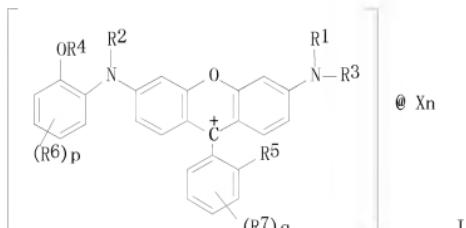
CRN 21228-90-0
CMF C H3 04 S

Me-O-SO₃⁻

OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L6 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2010 ACS on STN
 AN 1997:515357 CAPLUS
 DN 127:123082
 OREF 127:23723a, 23726a
 TI Jet recording inks and pigments
 IN Onodera, Akira; Ninomya, Hidetaka; Oya, Hidenobu; Ishibashi, Daisuke;
 Morimoto, Hitoshi
 PA Konica Co., Japan
 SO Jpn. Kokai Tokkyo Koho, 18 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN. CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09157562	A	19970617	JP 1995-316691	19951205
JP 3557759	B2	20040825		
PRAI JP 1995-316691		19951205		
OS MARPAT 127:123082				
GI				



AB Magenta-colored inks for color images with good light resistance and color reproducibility contain pigments I (R1, R2 = H, alkyl, alkenyl, alkynyl, aralkyl; R3 = H, alkyl, alkenyl, alkynyl, aralkyl, aromatic group, heterocycle, R3 and R1 can form a ring with N; R4 = alkyl, alkenyl, alkynyl, aralkyl, aromatic group, heterocycle; R5 = sulfo, carboxy, sulfamoyl, carbamoyl, alkoxy carbonyl; R6, R7 = halogen, alkyl, alkoxy, alkenyloxy, alkynyloxy, aralkyloxy, aromatic oxy, heterocyclic oxy, acylamino, sulfonyl amino, ureido, urethane, alkoxy carbonyl, carbamoyl, sulfamoyl, sulfonyl, acyl, amino, cyano, hydroxy, sulfo, carbonyl; p, q = 0-4, Xn = anion).

IT 192720-29-9

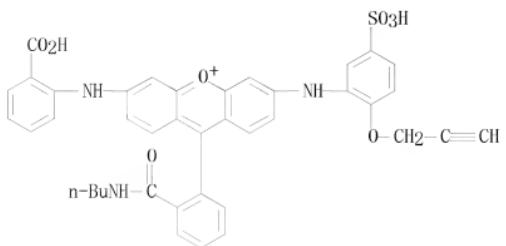
RL: TEM (Technical or engineered material use); USES (Uses)
 (jet recording inks and pigments)

RN 192720-29-9 CAPLUS

CN Xanthylum, 9-[2-[(butylamino) carbonyl] phenyl]-3-[(2-carboxyphenyl) amino]-6-[[2-(2-propyn-1-yloxy)-5-sulfo phenyl] amino]-, methanesulfonate, sodium salt (1:1:1) (CA INDEX NAME)

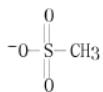
CM 1

CRN 192720-28-8
 CMF C40 H34 N3 08 S



CM 2

CRN 16053-58-0
 CMF C H3 03 S



L6 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1996:87653 CAPLUS

DN 124:148952

OREF 124:27661a, 27664a

TI Water-based magenta color recording liquids

IN Yamada, Masahiro; Murata, Jukichi

PA Mitsubishi Kagaku KK, Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

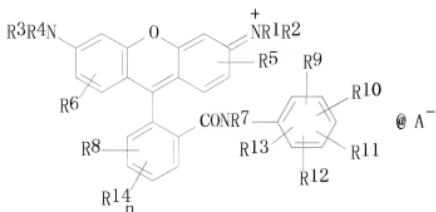
CODEN: JKXXAF

DT Patent

LA Japanese

FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07292303	A	19951107	JP 1994-91211	19940428
PRAI	JP 1994-91211		19940428		
OS	MARPAT 124:148952				
GI					



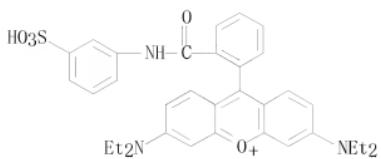
AB Title storage-stable liqs., useful for paper to give water-resistant printed image, contain water-based mediums and xanthene derivs. I [A = anion; R1-R4 = (un)substituted (cyclo)alkyl; R1 and R2, or R3 and R4 may form saturated heterocyclic ring with N; R5, R6 = H, C1-12 alkyl, halo; R7 = H, (un)substituted (cyclo)alkyl; R8-R13 = H, halo, C1-6 alkyl, C1-6 alkoxy, OH, NO₂, carboxy, sulfonic acid; R14 = H, halo; n = 1-3]. Thus, an ink comprising I (A = Cl; R1-R4 = Et; R9 = 2-CO₂H; R8, R10-R14 = H) 3, diethylene glycol 10, iso-Pr alc. 3, and water to 100 parts was used in ink-jet printing on paper to give magenta image with high color d.

IT 173423-39-7

RL: TEM (Technical or engineered material use); USES (Uses)
(dyes; water-based jet printing inks containing magenta xanthene-type dyes)

RN 173423-39-7 CAPLUS

CN Xanthylium, 3,6-bis(diethylamino)-9-[2-[(3-sulfophenyl)amino]carbonyl]phenyl]-, chloride (1:1) (CA INDEX NAME)



● Cl⁻

=> d his full

(FILE 'HOME' ENTERED AT 08:50:58 ON 04 JAN 2010)

FILE 'REGISTRY' ENTERED AT 08:51:08 ON 04 JAN 2010

L1 STRUCTURE UPLOADED
 D
 L2 2 SEA SSS SAM L1
 D SCA
 L3 77 SEA SSS FUL L1
 D QUE L3 STAT
 L4 58 SEA ABB=ON PLU=ON L3 AND CAPLUS/LC
 L5 19 SEA ABB=ON PLU=ON L3 NOT L4
 D 1-19 IDE CAN

FILE 'CAPLUS' ENTERED AT 08:55:14 ON 04 JAN 2010

L6 15 SEA ABB=ON PLU=ON L3
 D 1-15 BIB ABS HITSTR

FILE HOME

FILE REGISTRY

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 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2009

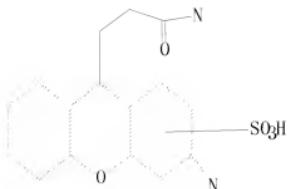
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CAS Information Use Policies apply and are available at:

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FILE COVERS 1907 - 4 Jan 2010 VOL 152 ISS 2
FILE LAST UPDATED: 3 Jan 2010 (20100103/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L11 3 L9

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L11 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2010 ACS on STN

AN 2007:1364408 CAPLUS

DN 148:35065

TI Rhodamine fluorescent dye compounds and the use of their labeled conjugates

IN Romanov, Nikolai Nikolaevich; Barnes, Colin Lloyd

PA Solexa Limited, UK

SO PCT Int. Appl., 102 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007135368	A2	20071129	WO 2007-GB1770	20070516
	WO 2007135368	A3	20080306		
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	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
	EP 2021415	A2	20090211	EP 2007-732794	20070516
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS				

PRAI US 2006-801270P P 20060518

WO 2007-GB1770 W 20070516

OS CASREACT 148:35065; MARPAT 148:35065

AB The invention relates to rhodamine dyes particularly suitable for methods of fluorescence detection and sequencing synthesis. The dyes and labeled conjugates are useful as mol. probes in a variety of applications, such as in assays involving staining of cells, protein binding, and anal. of nucleic acids, such as hybridization assays and nucleic acid sequencing. Thus, a rhodamine dye bearing N-propylsulfonic acid ammonium salt was prepared and tested.

IT 958868-84-3P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(manufacture of rhodamine fluorescent dye compds. and use in biomol. staining or labeling)

RN 958868-84-3 CAPLUS

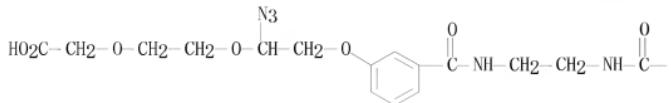
CN Poly(oxy-1, 2-ethanediyl), α -[3-[[2-[[3-[2-azido-2-[2-(carboxymethoxy)ethoxy]ethoxy]benzoyl]amino]ethyl]amino]-3-oxopropyl]- ω -[2-[[4-[[2-[3,6-bis(ethylamino)-4,5-disulfoxanthyl]methyl]benzoyl]methylamino]-1-oxobutyl]amino]ethoxy]-, inner salt, compd. with N,N-diethylethanamine (1:1) (CA INDEX NAME)

CM 1

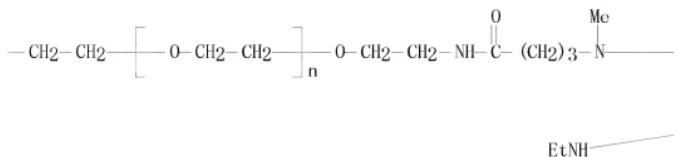
CRN 924660-21-9

CMF (C₂ H₄ O)_n C49 H59 N9 O17 S2
CCI PMS

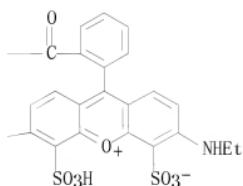
PAGE 1-A



PAGE 1-B



PAGE 1-C



CM 2

CRN 121-44-8
CMF C6 H15 N

Et
Et-N-Et

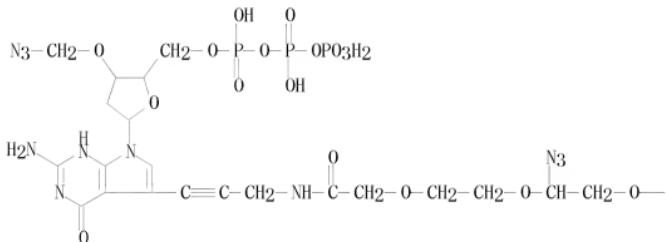
IT 924660-22-0P 958868-83-2P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(probe synthesis; manufacture of rhodamine fluorescent dye compds. and use in biomol. staining or labeling)

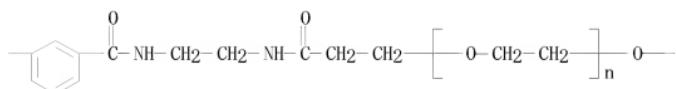
RN 924660-22-0 CAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[3-[[2-[[3-[2-[2-[[3-[2-amino-7-[3-0-(azidomethyl)-2-deoxy-5-O-[hydroxy[[hydroxy(phosphonoxy)phosphinyloxy]phosphinyloxy]beta-D-erythro-pentofuranosyl]-4,7-dihydro-4-oxo-3H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-propyn-1-yl]amino]-2-oxoethoxy]ethoxy]-2-azidoethoxy]benzoyl]amino]ethyl]amino]-3-oxopropyl]- ω -[2-[[4-[[2-[3,6-bis(ethylamino)-4,5-disulfoxanthylum-9-yl]benzoyl]methylamino]-1-oxobutyl]amino]ethoxy] $^-$, inner salt (CA INDEX NAME)

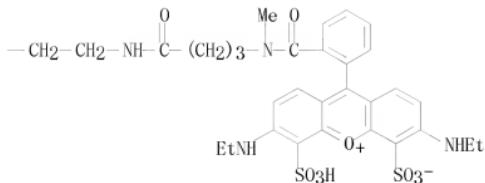
PAGE 1-A



PAGE 1-B



PAGE 1-C



RN 958868-83-2 CAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[2-[[4-[[2-[2,7-bis(ethylamino)-1,8-disulfoxanthylium-9-yl]benzoyl]methylamino]-1-oxobutyl]amino]ethyl]- ω -(2-carboxyethoxy)-, inner salt, compd. with N,N-diethylethanamine (1:1) (CA INDEX NAME)

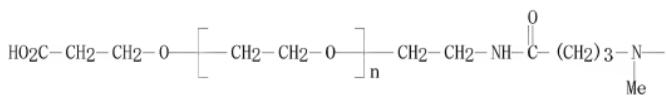
CM 1

CRN 924660-20-8

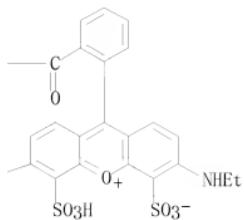
CMF (C₂ H₄ O)_n C34 H40 N4 O12 S2

CCI PMS

PAGE 1-A

EtNH⁻

PAGE 1-B



CM 2

CRN 121-44-8
CMF C6 H15 N

L11 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2010 ACS on STN
 AN 2007:198977 CAPLUS

DN 146:229558

TI Preparation and quenching effect of fluorescent labeled dye-containing modified nucleosides and nucleotides and uses thereof

IN Liu, Xiaohai; Milton, John

PA Solexa Limited, UK

SO PCT Int. Appl., 51pp.

CODEN: PIXXD2

DT Patent

LA English

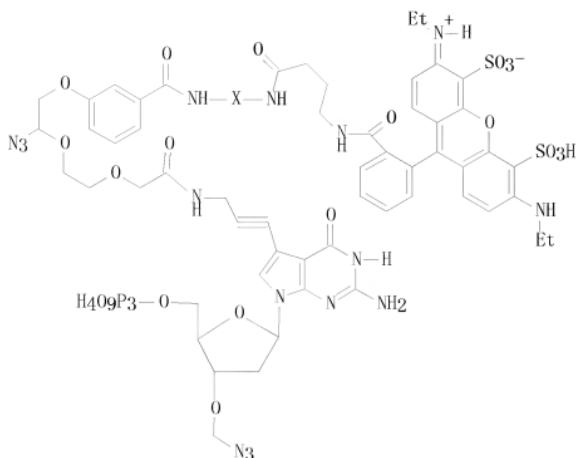
FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007020457	A2	20070222	WO 2006-GB3095	20060818
	WO 2007020457	A3	20071025		
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	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
	US 20070042407	A1	20070222	US 2006-494279	20060727
	US 7592435	B2	20090922		
	EP 1926829	A2	20080604	EP 2006-779167	20060818
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
PRAI	GB 2005-17097	A	20050819		
	WO 2006-GB3095	W	20060818		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS CASREACT 146:229558

GI



AB Modified guanine-containing nucleosides and nucleotides, in particular fluorescent labeled guanine-containing nucleosides and nucleotides, which exhibit reduced quenching effects, and hence enhanced brightness of the fluorophore are described. Thus, nucleotide I [X = $-\text{CH}_2\text{CH}_2\text{NHCOCH}_2\text{CH}_2(\text{OCH}_2\text{CH}_2)_11\text{OCH}_2\text{CH}_2-$] was prepared and tested for incorporation into a polynucleotide by phosphodiester linkage of each resp. nucleotide to the 3' end of a DNA strand, the precise sequence of which is not of relevance. The fluorescent intensity of the dye in each of the modified nucleotides was then measured, both before and after treatment with tris(2-carboxyethyl)phosphine.

IT treatment w/
924660-22-0P

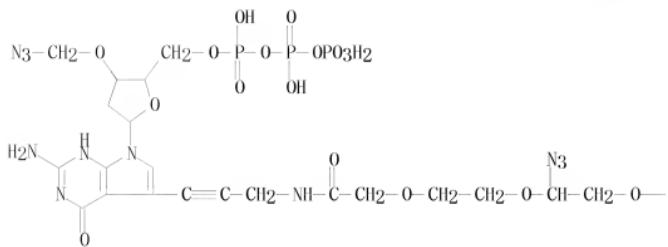
PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and quenching effect of fluorescently labeled dye-containing modified nucleosides and nucleotides and uses thereof)

RN 924660-22-0 CAPLUS

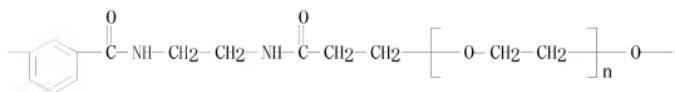
CN Poly(oxy-1, 2-ethanediyl), α -[3-[2-[2-[3-[2-[2-[2-[2-[3-[2-amino-7-[3-0-

(azidomethyl)-2-deoxy-5'-
[hydroxy[hydroxy(phosphonoxy)phosphinyl]oxy]phosphinyl]- β -D-erythro-
pentofuranosyl]-4, 7-dihydro-4-oxo-3H-pyrrolo[2, 3-d]pyrimidin-5-yl]-2-
propyl-1-yl]amino]-2-oxoethoxy]ethoxy]-2-
azidoethoxy[benzoyl]aminoethyl]amino]-3-oxopropyl]- ω -[2-[[4-[[2-[
3, 6-bis(ethylamino)-4, 5-disulfoxanthylium-9-yl]benzoyl]methylamino]-1-
oxobutyl]amino]ethoxy]-, inner salt (CA INDEX NAME)

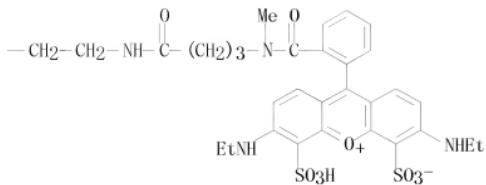
PAGE 1-A



PAGE 1-B



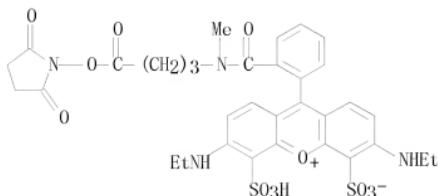
PAGE 1-C



RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation and quenching effect of fluorescent labeled dye-containing modified nucleosides and nucleotides and uses thereof)

RN 924660-19-5 CAPLUS

CN Xanthylium, 9-[2-[[[4-[(2,5-dioxo-1-pyrrolidinyl)oxy]-4-oxobutyl]methylamino]carbonyl]phenyl]-3,6-bis(ethylamino)-4,5-disulfo-, inner salt (CA INDEX NAME)



IT 924660-20-8P 924660-21-9P

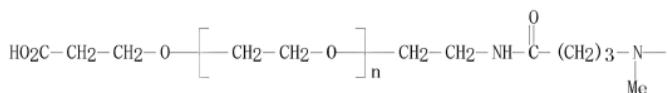
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and quenching effect of fluorescent labeled dye-containing modified nucleosides and nucleotides and uses thereof)

RN 924660-20-8 CAPLUS

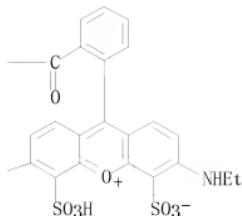
CN Poly(oxy-1, 2-ethanediyl), α -[2-[[4-[[2-[3, 6-bis(ethylamino)-4, 5-disulfoxanthylium-9-yl]benzoyl]methylamino]-1-oxobutyl]amino]ethyl]- ω -(2-carboxyethoxy)-, inner salt (CA INDEX NAME)

PAGE 1-A



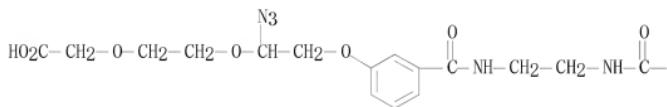
EtNH-

PAGE 1-B

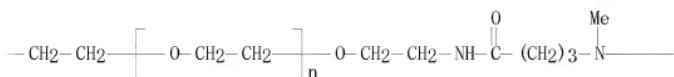


RN 924660-21-9 CAPLUS
 CN Poly(oxy-1, 2-ethanediyl), α -[3-[[2-[[3-[2-azido-2-[2-(carboxymethoxy)ethoxy]benzoyl]amino]ethyl]amino]-3-oxopropyl]- ω -[2-[[4-[2-[3, 6-bis(ethylamino)-4, 5-disulfoxanthylium-9-yl]benzoyl]methylamino]-1-oxobutyl]amino]ethoxy]-, inner salt (CA INDEX NAME)

PAGE 1-A

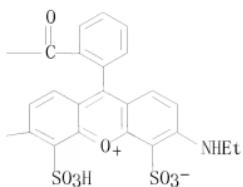


PAGE 1-B



EtNH-

PAGE 1-C



OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L11 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2010 ACS on STN
 AN 2005:1004902 CAPLUS
 DN 143:262496

TI Specific substrates for 06- alkylguanine-DNA alkyltransferase
 IN Jaccard, Hughes; Johnsson, Kai; Kindermann, Maik; Sielaff, India Christina
 PA EPFL Ecole Polytechnique Federale De Lausanne, Switz.
 SO PCT Int. Appl., 78 pp.
 CODEN: PIIXD2

DT Patent

LA English

FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005085470	A1	20050915	WO 2005-EP50900	20050301
	WO 2005085470	A9	20061005		
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	EP 1571224	A1	20050907	EP 2004-405124	20040302
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	EP 1730298	A1	20061213	EP 2005-716866	20050301
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	JP 2007526282	T	20070913	JP 2007-501285	20050301
	US 20070243568	A1	20071018	US 2006-591162	20061003
PRAI	EP 2004-405124	A	20040302		
	WO 2005-EP50900	W	20050301		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS MARPAT 143:262496

AB The invention relates to substrates for 06-alkylguanine-DNA alkyltransferases (AGT) of formula R1-A-X-CH2-R3-R4-L1 (A = a group recognized by AGT as a substrate; X = O, S; R1 = -R2-L2, R5; R2, R4 = linker; R3 = aromatic or heteroarom. group, (substituted) unsatd. alkyl, cycloalkyl or heterocyclyl group with the double bond connected to CH2; R5 = arylmethyl, heteroaryl methyl, (substituted) cycloalkyl, cycloalkenyl or heterocyclyl group; L1 = label, plurality of same or different labels, bond connecting R4 to A forming a cyclic substrate, further group -R3-CH2-X-A-R1; L2 = label, plurality of same or different labels). The invention further relates to methods of transferring a label from these substrates to AGT and AGT fusion proteins.

IT 1026870-98-3 1067188-77-5 1067188-95-7

RL: PRPH (Prophetic)

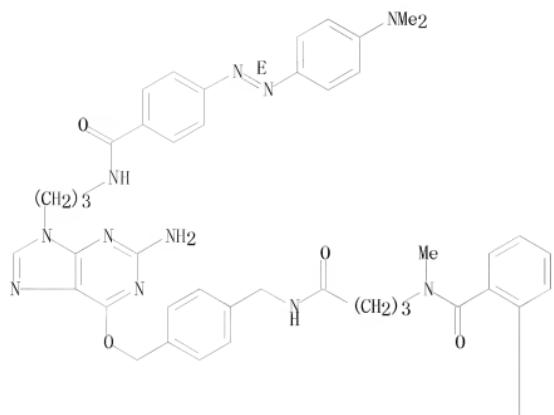
(Specific substrates for 06- alkylguanine-DNA alkyltransferase)

RN 1026870-98-3 CAPLUS

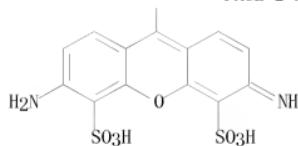
CN INDEX NAME NOT YET ASSIGNED

Double bond geometry as shown.

PAGE 1-A

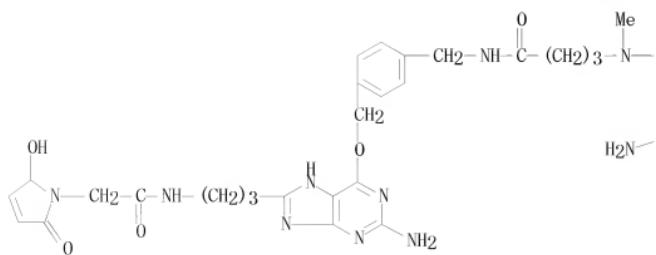


PAGE 2-A

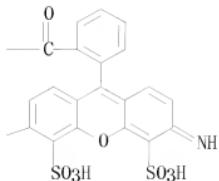


RN 1067188-77-5 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED

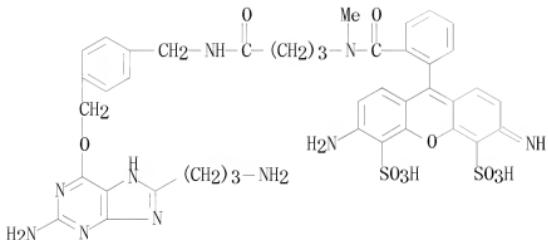
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PAGE 1-B



RN 1067188-95-7 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED

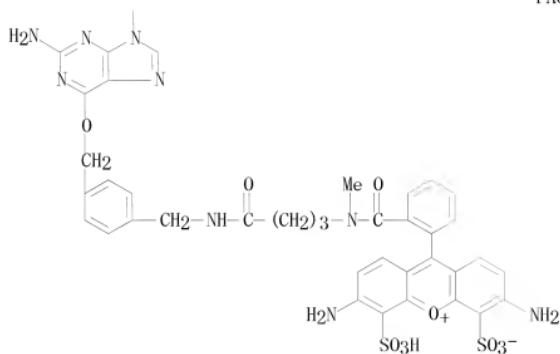


IT 863772-06-9P 863772-14-9P 863772-20-7P
 RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)
 (specific substrates for 06- alkylguanine-DNA alkyltransferase)
 RN 863772-06-9 CAPLUS
 CN Xanthylium, 3,6-diamino-9-[2-[[[4-[[[4-[[2-amino-9-[3-[[4-[2-[4-(dimethylamino)phenyl]diazenyl]benzoyl]amino]propyl]-9H-purin-6-yl]oxy]methyl]phenyl]methyl]amino]-4-oxobutyl]methylamino]carbonyl]phenyl]-4,5-disulfo-, inner salt (CA INDEX NAME)

PAGE 1-A



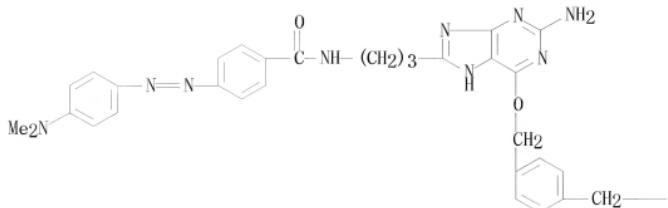
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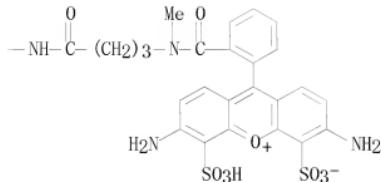
RN 863772-14-9 CAPLUS

CN Xanthylium, 3,6-diamino-9-[2-[[4-[[4-[[2-amino-8-[3-[[4-[2-[4-(dimethylamino)phenyl]diazenyl]benzoyl]amino]propyl]-9H-purin-6-yl]oxy]methyl]phenyl]methyl]amino]-4-oxobutyl]methylamino]carbonyl]phenyl]-4,5-disulfo-, inner salt (CA INDEX NAME)

PAGE 1-A



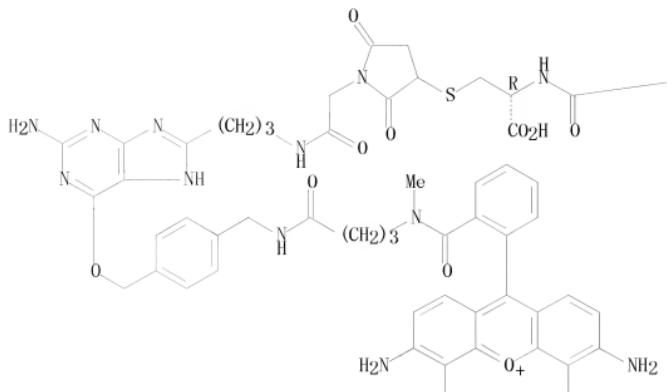
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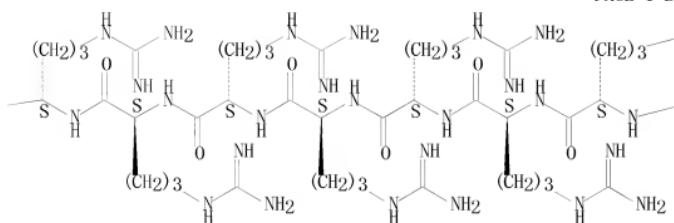
RN 863772-20-7 CAPLUS
 CN L-Cysteine, L-tyrosyl-L-arginyl-L-arginyL-L-arginyL-L-arginyL-L-arginyL-L-
 arginyL-L-arginyL-L-arginyL-L-arginyL-S-[1-[2-[3-[2-amino-6-[[4-[[4-[[2-
 (3,6-diamino-4,5-disulfoxanthylium-9-yl)benzoyl]methylamino]-1-
 oxobutyl]amino]methyl]phenyl]methoxy]-1H-purin-8-yl]propyl]amino]-2-
 oxoethyl]-2,5-dioxo-3-pyrrolidinyl]-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

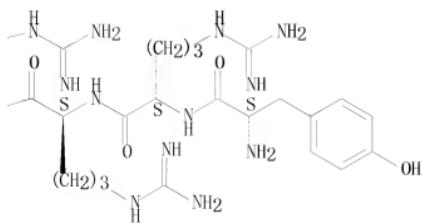
PAGE 1-A



PAGE 1-B



PAGE 1-C



PAGE 2-A

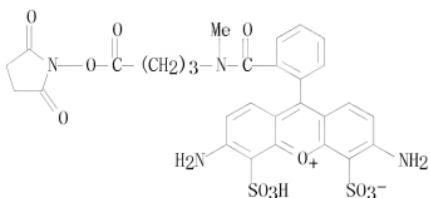


IT 863772-22-9 863772-24-1

RL: RCT (Reactant); RACT (Reactant or reagent)
(specific substrates for 06- alkylguanine-DNA alkyltransferase)

RN 863772-22-9 CAPLUS

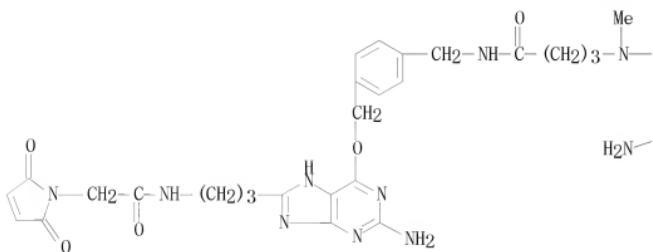
CN Xanthylium, 3,6-diamino-9-[2-[[[4-[[(2,5-dioxo-1-pyrrolidinyl)oxy]-4-oxobutyl]methylamino]carbonyl]phenyl]-4-, 5-disulfo-, inner salt (CA INDEX NAME)



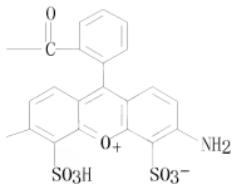
RN 863772-24-1 CAPLUS

CN Xanthylium, 3,6-diamino-9-[2-[[[4-[[(2-amino-8-[3-[[2-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)acetyl]amino]propyl]-9H-purin-6-yl)oxy]methyl]phenyl]methyl]amino]-4-oxobutyl]methylamino]carbonyl]phenyl]-4,5-disulfo-, inner salt (CA INDEX NAME)

PAGE 1-A



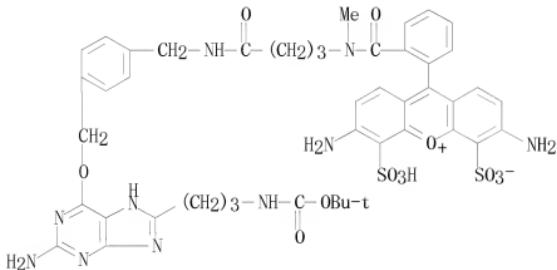
PAGE 1-B



IT 863772-19-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (specific substrates for 06- alkylguanine-DNA alkyltransferase)

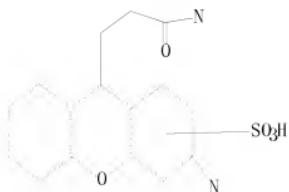
RN 863772-19-4 CAPLUS

CN Xanthylum, 3,6-diamino-9-[2-[[4-[[4-[[2-amino-8-[3-[[1,1-dimethylethoxy]carbonyl]amino]propyl]-9H-purin-6-yl]oxy]methyl]phenyl]methyl]amino]-4-oxobutyl]methylamino]carbonyl]phenyl]-4,5-disulfo-, inner salt (CA INDEX NAME)



OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
 RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> => d que 113 stat
L7 STR



Structure attributes must be viewed using STN Express query preparation.
L13 36 SEA FILE=MARPAT SSS FUL L7

100.0% PROCESSED 2699 ITERATIONS
SEARCH TIME: 00.00.01

36 ANSWERS

=> d 1-36 bib abs fqhit

L13 ANSWER 1 OF 36 MARPAT COPYRIGHT 2010 ACS on STN

AN 151:215172 MARPAT

TI Fluorogenic hydrazine-substituted compounds useful in the detection of analytes containing aldehydes and ketone groups.

IN Chen, Aimei; Gee, Kyle R.; Kang, Hee Chol

PA Life Technologies Corporation, USA

SO PCT Int. Appl., 103pp.

CODEN: PIXXD2

DT Patent

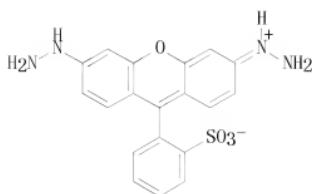
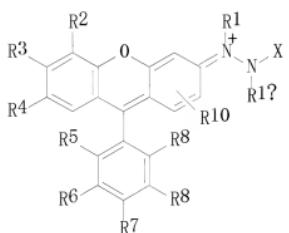
LA English

FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2009094536	A1	20090730	WO 2009-US31830	20090123
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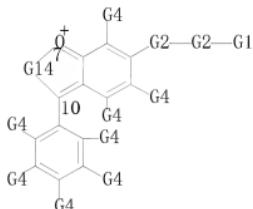
PRAI US 2008-23191P 20080124

GI



AB The disclosure is directed to fluorogenic Schiff base-forming dyes of formula I capable of detecting analytes containing aldehyde and ketone groups. The dyes contain nucleophilic hydrazinyl appendages and are capable of binding and detecting analytes in situ. Compds. of formula I wherein X is H and an analyte; R1 and R1a are independently H and (un)substituted alkyl; R2, R4 - R10 are independently H, (un)substituted alkyl, (un)substituted alkoxy, acyl, acylamino, etc.; R3 is (un)substituted alkoxy, (un)substituted amino, (un)substituted hydrazinyl, etc.; and stereoisomers, tautomers, hydrates, solvates and salts thereof, are claimed. Example compound II was prepared by hydrolysis of bis-Boc-protected II. Compound II was tested for its fluorescent activity towards aldehyde (some data given).

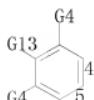
MSTR 1



G2 = NH
G4 = 45 / SO₃H



G8 = O
G9 = NH₂ (opt. substd.)
G14 = 4-7 5-10



Patent location:

claim 1

Note: or tautomers, hydrates, solvates, or salts
Note: additional ring formation also claimed
Note: additional oxo substitution also disclosed
Note: also incorporates claim 108, structure IIIa
Stereochemistry: or stereoisomers

ALL CITATIONS AVAILABLE IN THE RE FORMAT

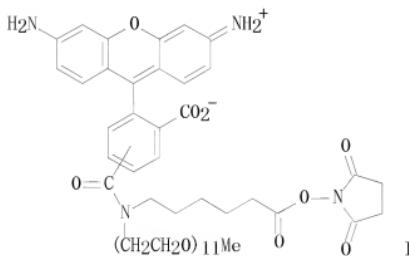
L13 ANSWER 2 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
AN 151:96479 MARPAT
TI Fluorescent compounds for labeling biomolecules and cells and use in kits
and assays
IN Mao, Fei; Leung, Wai-Yee; Cheung, Ching-Ying; Hoover, Hye Eun
PA Biotium, Inc., USA
SO PCT Int. Appl., 157pp.
CODEN: PIXXD2
DT Patent
LA English
FAN, CNT 1

PATENT NO.		KIND	DATE	APPLICATION NO.		DATE
PI	WO 2009078970	A1	20090625	WO 2008-US13698	20081212	
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	US 20090305410	A1	20091210	US 2008-334387	20081212	

PRAI US 2007-13956P 20071214
GI

GI

61



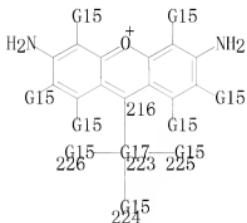
AB The present invention relates to fluorescent dyes in general. The present invention provides a wide range of fluorescent dyes and kits containing the same, which are applicable for labeling a variety of biomols, cells and microorganisms. The present invention also provides various methods of using the fluorescent dyes for research and development, forensic identification, environmental studies, diagnosis, prognosis, and/or treatment of disease conditions. Fluorescent dye I (preparation given) was conjugated with goat anti-mouse IgG and with aminophalloidin. Actin

filaments were stained with phalloidin labeled with I. I conjugate was more photostable than a conjugate with Alex Fluor 488.

MSTR 1

G1—G2

G1 = 223



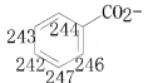
G2 = 201

$\Sigma_{201}^{(0)} - G13$

G13 = NH2
G15 = 233

$\Sigma_{233}^{(0)} - G16$

G16 = OH (opt. substd.)
G17 = 243-2 244-216 242-224 247-225 246-226



Patent location:

claim 1

Note:

substitution is restricted

Note:

additional derivatization also disclosed

RE. CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 36 MARPAT COPYRIGHT 2010 ACS on STN

AN 150:425027 MARPAT

TI Amide-substituted fluorescent xanthene dyes

IN Lukhtanov, Eugene

PA Epoch Biosciences, Inc., USA

SO PCT Int. Appl., 84pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

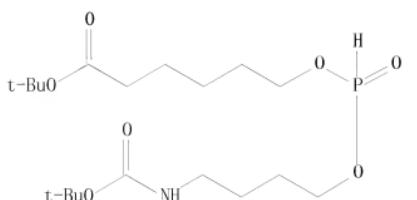
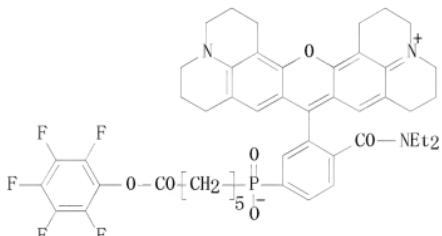
PATENT NO. KIND DATE APPLICATION NO. DATE

PI	WO 2009046165	A1	20090409	WO 2008-US78540	20081002
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US 20090093612 A1 20090409 US 2008-244712 20081002

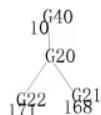
PRAI US 2007-977316P 20071003

GI

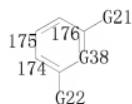


AB Amide-substituted xanthene fluorescent dyes such as I can be prepared from xanthene dyes using a phosphorylation agent (II). Thus, I was prepared by mixing 0.85 g a Br-substituted xanthene dye, 2.2 mL DMF, 1 mL N-ethylmorpholine and 1.27 g II and heating 3 h at 70° in the presence of 0.12 g tetrakis(triphenylphosphine)palladium followed by treating with pentafluorophenyl trifluoroacetate and reacting with diethylamine.

MSTR 1



$\begin{array}{ll} G6 & = OH \\ G15 & = NH_2 \\ G20 & = 176-10 \ 175-168 \ 174-171 \end{array}$



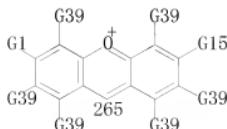
$G21 = 152$

$\begin{array}{ll} C & (O) \\ 152 & G27 \end{array}$

$\begin{array}{ll} G27 & = NH_2 \\ G39 & = 200 \end{array}$

O_2S-66

$G40 = 265$



Patent location:
Note:

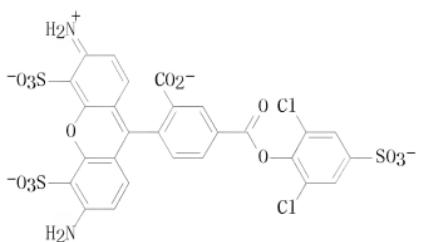
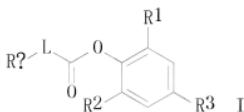
claim 1
additional derivatizations also claimed

RE. CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 4 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
AN 150:100042 MARPAT
TI Preparation of reactive dyes as labeling reagents
IN Antoulinakis, Evan; Witzak, Diane M.; Gee, Kyle; Rukavishnikov, Aleksey
PA Invitrogen Corporation, USA
SO U.S. Pat. Appl. Publ., 53pp.
CODEN: USXCCO

DT Patent
LA English
FAN. CNT 1

PATENT NO.		KIND	DATE	APPLICATION NO.	DATE
PI	US 20090004753	A1	20090101	US 2008-23019	20080130
PRAI	US 2007-887218P		20070130		
GI					



AB The present disclosure is directed to reactive esters I [wherein L = a linker; R1 and R2 = independently halo; R3 = a water solubilizing group; Ra = a reporter mol.] capable of conjugating a reporter mol. to a carrier mol. or solid support. For example, 4-(6-amino-3-imino-4,5-disulfo-3H-xanthen-9-yl)-1,3-benzenedicarboxylic acid tris(triethylamine) was reacted with 4-oxa-(potassium 3,5-dichloro-4-oxidobenzenesulfonate)tetramethyluronium hexafluorophosphate (preparation given) to give $\text{II}\bullet 3\text{Na}^+$ (63%). In biol. test using goat anti-mouse antibody, $\text{II}\bullet 3\text{Na}^+$ showed 8.9 labeling degree in 25 mM phosphate buffer at pH of 8.6.

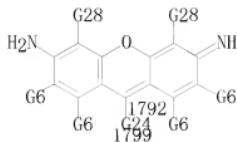
MSTR 1

G2 (0)-G1
G4

$$G1 = 1897$$

G42-G43
1897

G4 = 1799



G24 = phenylene (opt. subst. by 1 or more G27)

G28 = SO3H

G42 = NH (opt. subst.)

Patent location:

claim 1

Note: additional ring and oxo formation also claimed

Note: or tautomers or salts

Note: also incorporates claim 28, structure I and claim 53, structure IB

L13 ANSWER 5 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 150:35230 MARPAT
 TI Long wavelength fluorogenic intercellular ion indicators
 IN Gee, Kyle; Martin, Vladmir
 PA Invitrogen Corporation, USA
 SO PCT Int. Appl., 80pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI	WO 2008151303	A1	20081211	WO 2008-US65986	20080605
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW					
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					

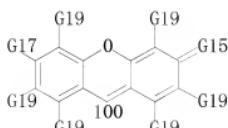
PRAI US 2007-942163P 20070605

AB Cell permeable metal ion indicator compds. and methods of their use and synthesis are described. The compound comprises a metal chelating moiety (Mc), a reporter mol. and two or more lipophilic groups (GL) covalently bonded through a linker to the reporter mol., wherein the lipophilic groups, when present in a live cell, are cleaved resulting in two or more neg. charged groups.

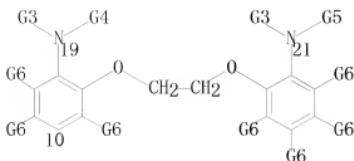
MSTR 1

G1—G2 G12

G1 = 100



G2 = 10



G6 = 50



G9 = NH₂ (opt. substd.)

G11 = O

G15 = NH

G19 = SO₃H

Patent location:

claim 9

Note: additional ring formation also claimed

Note: additional oxo formation also disclosed

Note: substitution is restricted

Note: and complexes with G12

Note: additional ligands also claimed

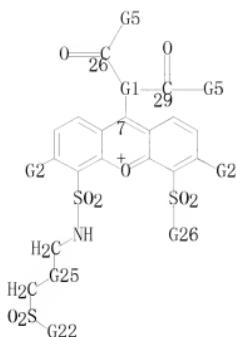
RE. CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 6 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 149:200790 MARPAT
 TI Preparation of sulfonamide derivatives of xanthene as fluorescent
 detection reagents
 IN Frank, Wilhelm G.; Wenzel, Matthias S.; Czerney, Peter T.; Desai, Surbhi;
 Hermanson, Greg
 PA Pierce Biotechnology, Inc., USA
 SO Eur. Pat. Appl., 33 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN. CNT 1
 PATENT NO. KIND DATE APPLICATION NO. DATE
 PI EP 1947095 A1 20080723 EP 2008-250265 20080122
 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
 IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI,
 SK, TR, AL, BA, MK, RS
 US 20080177086 A1 20080724 US 2007-625379 20070122
 JP 2008231093 A 20081002 JP 2008-10915 20080121
 PRAI US 2007-625379 20070122
 OS CASREACT 149:200790
 GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Disclosed are compds. I [R11 = Q1 or Q2; R1, R2 = -H, -alkyl or
 -o-sulfoalkyl; X, Y = -O-, -OH, -SH, etc.; Z = -O- or OH; U = -O-,
 -OH or NH-L-SO2Z; L = divalent linear $-(CH_2)_o-$, crossed, or cyclic
 alkane group that can be substituted by at least one atom selected from
 the group consisting of oxygen, substituted nitrogen and/or sulfur; o =
 1-15; Kat = Li, Na, K, etc.; An = F, Cl, Br, etc.; m = 1-6 necessary to
 compensate the neg. or pos. charge from the dye moiety; n = 0-12] were
 prepared. Thus, a multi-step synthesis of II: 2EtN+H(iso-Pr)2 (III),
 starting from 5-(6)-carboxyrhodamine 110 hydrochloride, was given. It was
 demonstrated that compds. I are useful as fluorescent dyes in biol.
 assays. For example, rabbit IgG was detected at a level of 2 ng/well with
 the III-GAR (Goat anti-Rabbit) conjugate.

MSTR 1



G1 = 34-26 37-7 36-29



G2 = NH2
G5 = 49



G25 = (0-12) CH2
G26 = 196



Patent location: claim 1

RE. CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

1 or more heteroatoms, zero or more N, zero or more O,
zero or more S, zero or more B, zero or more P,
zero or more Se> (opt. substd.) / S03H (opt. substd.)

G23 = CONH2 (opt. substd.)

Patent location: claim 1
Note: or salts

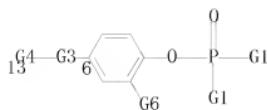
L13 ANSWER 8 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 148:9415 MARPAT
 TI Antibody-label complexes and methods for antigen or ligand immunolabeling or detection, diagnosis and therapy
 IN Beechem, Joseph; Hagen, David; Johnson, Iain
 PA Molecular Probes, Inc., USA
 SO U.S. Pat. Appl. Publ., 74 pp., Cont.-in-part of U.S. Ser. No. 467,550.
 CODEN: USXXCO

DT Patent
 LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20070269902	A1	20071122	US 2003-666291	20030917
	US 20030073149	A1	20030417	US 2002-118204	20020405
	WO 2003030817	A2	20030417	WO 2002-US31416	20021002
	WO 2003030817	A3	20030918		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 2113773	A2	20091104	EP 2009-163588	20021002
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, SK, TR				
	US 20050069962	A1	20050331	US 2004-467550	20041012
PRAI	JP 2007183291	A	20070719	JP 2007-83130	20070327
US	2001-329068P	20011012			
US	2002-369418P	20020401			
US	2002-118204	20020405			
WO	2002-US31416	20021002			
US	2004-467550	20041012			
EP	2002-768949	20021002			
JP	2003-533851	20021002			

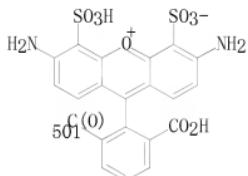
AB The present invention provides labeling reagents and methods for labeling primary antibodies and for detecting a target in a sample using an immuno-labeled complex that comprises a target-binding antibody and one or more labeling reagents. The labeling reagents comprise monovalent antibody fragments or non-antibody monomeric proteins whereby the labeling reagents have affinity for a specific region of the target-binding antibody and are covalently attached to a label. Typically, the labeling reagent is an anti-Fc Fab or Fab' fragment that was generated by immunizing a goat or rabbit with the Fc fragment of an antibody. The present invention provides for discrete subsets of labeling reagent and immuno-labeled complexes that facilitate the simultaneous detection of multiple targets in a sample wherein the immuno-labeled complexes are distinguished by (i) a ratio of label to labeling reagent, or (ii) a phys. property of said label, or (iii) a ratio of labeling reagent to said target-binding antibody, or (iv) by said target-binding antibody. This is particularly useful for fluorophore labels that can be attached to labeling reagents and subsequently immuno-labeled complexes in ratios for the detection of multiple targets.

MSTR 1

G3 = 18-13 20-6

 $\text{H}_8\text{N}-\text{CH}_2-\text{CH}_2$

G4 = 501

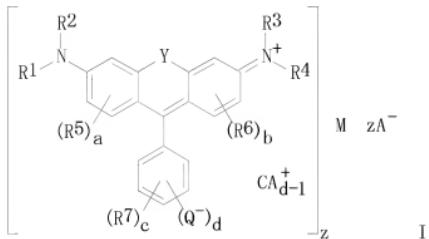


Patent location: disclosure

L13 ANSWER 9 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 144:172711 MARPAT
 TI Colorant compounds for phase change inks with good chroma strength
 IN Banning, Jeffrey H.; Wu, Bo; Bridgeman, Randall R.; Titterington, Donald R.
 PA Xerox Corp., USA
 SO U.S. Pat. Appl. Publ., 80 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 1

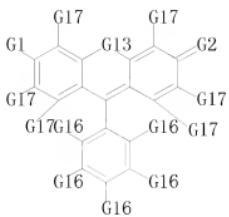
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060020141	A1	20060126	US 2004-898028	20040723
CN 1724532	A	20060125	CN 2005-10087525	20050722
BR 2005002897	A	20060307	BR 2005-2897	20050725
PRAI US 2004-898028		20040723		

GI

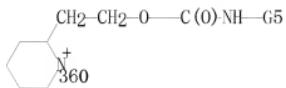


AB The present invention relates to compds. I, wherein M = metal ion having a pos. charge of y; y = ≥ 2 integer, the metal ion being capable of forming a compound with at least two chromogen moieties, or metal-containing moiety capable of forming a compound with ≥ 2 chromogen moieties; z = ≥ 2 integer; R1, R2, R3, R4 = H, alkyl, aryl, arylalkyl, or alkylaryl; R5, R6, R7 = alkyl, aryl, arylalkyl, alkylaryl, halogen, or group; a, b = 0-3 integer; c = 0-4 integer; d = 1-5 integer; Q- = COO- or SO3-; A = organic anion; and CA = H or cation associated with all but one of the Q- groups. Thus, 100 g fluorescein was reacted with 128.5 g phosphorus pentachloride at 140° for 6 h, 105 g of the resulting mixture was reacted with 288 g distearylamine at 120° in the presence of 0.62 mol calcium oxide and 0.85 mol zinc chloride, purified, 229 g of the resulting tetrastearyl colorant was mixed with 12.2 g zinc chloride and stirred for 18 h to give a colorant, which was formulated into a phase change ink, showing good chroma strength..

MSTR 1



G2 = 360



G13 = 0

G16 = CONH2 (opt. subst.)

G17 = SO3H (opt. subst.)

Patent location:

claim 1

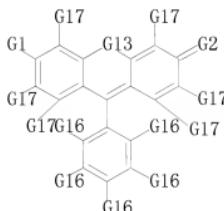
Note: additional ring formation also claimed

L13 ANSWER 10 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
AN 144:152002 MARPAT
TI Preparing phase change inks and certain magenta colorants for phase change
inks
IN Wu, Bo; Banning, Jeffrey H.; Bridgeman, Randall R.; Titterington, Donald
R.
PA Xerox Corporation, USA
SO U.S. Pat. Appl. Publ., 123 pp.
CODEN: USXXCO
DT Patent
LA English
FAN CNT_1

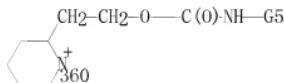
PATENT NO.		KIND	DATE	APPLICATION NO.	DATE
PI	US 20060021546 US 7811767	A1 B2	20060202 20071005	US 2004-898724	20040723

PRAI US 7311767 B2 20071225
US 2004-898724 20040723
AB Preparing phase change inks comprises admixing (a) a phase change ink carrier, (b) a colorant of the anthraquinone type, and (c) a organic metal salt $(M2+)^w(A2^-)^v$ of which the metal portion M2 is either a metal ion having pos. charge $+v$, a metal-containing moiety, or a mixture, and A2 is an anion having neg. charge $-w$, where M2 is metal, where A2 is anion, the admixing occurring at a temperature at which the ink carrier is a liquid

MSTR 1



G2 = 360



G13 = 0
 G16 = CONH₂ (opt. subst.)
 G17 = SO₃H (opt. subst.)

Patent location: claim 1
Note: additional ring formation also claimed

RE. CNT 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 11 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 144:151809 MARPAT
 TI Phase change inks
 IN Wu, Bo; Banning, Jeffrey H.; Bridgeman, Randall R.; Titterington, Donald R.

PA Xerox Corp., USA
 SO U.S. Pat. Appl. Publ., 87 pp.
 CODEN: USXXCO

DT Patent
 LA English

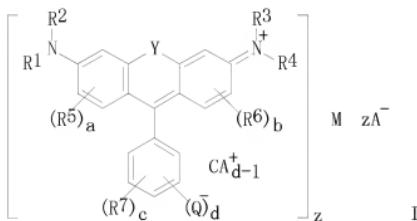
FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20060016369	A1	20060126	US 2004-898432	20040723
	US 7033424	B2	20060425		
	CN 1724597	A	20060125	CN 2005-10087524	20050722
	BR 2005002915	A	20060307	BR 2005-2915	20050722

PRAI US 2004-898432 20040723

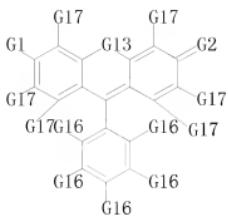
OS CASREACT 144:151809

GI

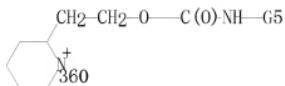


AB Phase change ink (or hot-melt ink) compns. comprise a phase change ink carrier and a colorant compound of the formula I wherein M is either (1) a metal ion having a pos. charge of y wherein y is an integer which is at least 2, said metal ion being capable of forming a compound with at least 2 chromogen moieties, or (2) a metal-containing moiety capable of forming a compound with at least 2 chromogen moieties, z is an integer representing the number of chromogen moieties associated with the metal and is at least 2, $\text{R}^1, \text{R}^2, \text{R}^3, \text{R}^4, \text{R}^5, \text{R}^6, \text{R}^7, \text{a}, \text{b}, \text{c}, \text{d}, \text{Y}$, and z are as defined in the document, Q^- is a COO^- group or a SO_3^- group, A is an organic anion, and C^{A} is either a hydrogen atom or a cation associated with all but one of the Q^- groups.

MSTR 1



G2 = 360



G13 = 0

G16 = CONH2 (opt. substd.)

G17 = SO3H (opt. substd.)

Patent location: claim 1

Note: additional ring formation also claimed

RE. CNT 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

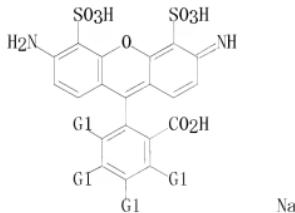
L13 ANSWER 12 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 143:345484 MARPAT
 TI Method of efficiently modifying surface of bacterium
 IN Nishimura, Shinichiro; Sadamoto, Reiko; Ueda, Taichi; Niikura, Kenichi
 PA Shionogi Co., Ltd., Japan
 SO PCT Int. Appl., 67 pp.
 CODEN: PIXXD2
 DT Patent
 LA Japanese
 FAN. CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2005095428	A1	20051013	WO 2005-JP5945	20050329
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRAI JP 2004-101518 20040330

AB A bacteria with a functional substance such as glucosamine derivative on the surface is prepared. In particular, a bacteria such as lactic acid bacteria which enhances intestinal absorption is produced. Also provided is a compound represented by the general formula (I): wherein R1, R2, and R3 each independently is hydrogen or a protective group; R4 is hydrogen, optionally substituted acetyl, optionally substituted monophosphate, optionally substituted diphosphate, or optionally substituted triphosphate; W is $-(C=O)-CH_2-$, $-CC-$, or a group imparting a function; X is a single bond or $-(CH_2)_n-$; n is an integer of 1 to 10; and Y is $-(C=O)-R_8$ (wherein R8 is alkyl), $-CCH_2-$, or a group imparting a function.

MSTR 2



G1 = (1) 31

$^{31}C(0)NH-NH_2$

Patent location: **claim 12**

RE CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 13 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 143:219552 MARPAT
 TI Azo dye, colored curable composition, color filter and producing method
 therefor
 IN Seto, Nobuo; Suzuki, Nobuo
 PA Fuji Photo Film Co., Ltd., Japan; Fujifilm Corporation
 SO U.S. Pat. Appl. Publ., 73 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN. CNT 3

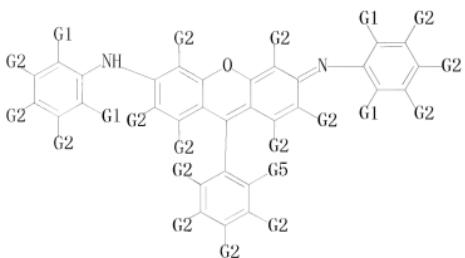
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20050175908	A1	20050811	US 2005-43991	20050128
	US 7601819	B2	20091013		
	JP 2005213357	A	20050811	JP 2004-21391	20040129
	JP 2005215286	A	20050811	JP 2004-21392	20040129
	JP 4332042	B2	20090916		
	JP 2005274788	A	20051006	JP 2004-85658	20040323
	JP 4328250	B2	20090909		
PRAI	JP 2004-21391	20040129			
	JP 2004-21392	20040129			
	JP 2004-85658	20040323			

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A dye is represented by I, a colored curable composition using the same, and a colored curable composition for color filter and liq crystal display including a dye represented by II and at least one dye represented by III or IV (Ra1 is an aliphatic group, an aryl group, a heterocyclic group, an acyl group or the like; Xa1 is -CRa3= or N; Ra2 and Ra3 = H or a substituent; B is a coupler residue; A is a residue of a 5-membered heterocyclic diazo component A-NH2; B1 and B2 is -CR1=, -CR2= or N; R5 and R6 is H, an aliphatic group, an aromatic group, a heterocyclic group or the like; G, R1 and R2 is H, halogen, an aliphatic group, an aromatic group, a heterocyclic group, a cyano group, a carboxyl group, a carbamoyl group, an alkoxy carbonyl group or the like; Rd1 to Rd4 is H or an aliphatic group; Rd5 is a sulfo group or a sulfamoyl group; Rd6 to Rd10 is a substituent; m, n, p and q = 0 to 3; r = 0 to 4).

MSTR 3



G2 = CONH₂ / SO₃H

Patent location: claim 3

L13 ANSWER 14 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 143:22621 MARPAT
 TI Competitive immunoassay using a ligand analog covalently bonded to a fluorescent reporter molecule
 IN Beechem, Joseph; Gee, Kyle; Hagen, David; Johnson, Iain; Kang, Hee Chol;
 Pastula, Christina
 PA Molecular Probes, Inc., USA
 SO PCT Int. Appl., 123 pp.
 CODEN: PIXXD2

DT Patent
 LA English

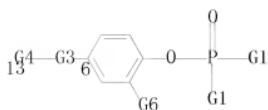
FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005050206	A2	20050602	WO 2004-US30711	20040917
	WO 2005050206	A3	20060302		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 20060160068	A1	20060720	US 2004-943463	20040917
	US 7282339	B2	20071016		

PRAI US 2003-504322P 20030917
 US 2003-505455P 20030923

AB The present invention provides ligand-detection reagents, ligand analogs and methods for determining the presence of a ligand in a sample. The ligand-detection reagent comprises a ligand-binding antibody and a ligand analog to form an antibody-ligand analog complex wherein the ligand analog is covalently bonded to a reporter mol. This complex may addnl. comprise a labeling protein non-covalently bonded to the antibody to form a ternary complex wherein the labeling protein comprises a monovalent antibody fragment or a non-antibody protein that is covalently bonded to a label moiety. The reporter mol. is either quenched by the ligand-binding antibody or by the label moiety of the labeling protein, depending on the reporter mol. and the ligand-binding antibody, wherein the amount of quenching is directly related to the amount of ligand present in the sample. Alternatively, the ligand analog is fluorogenic wherein the ligand analog is essentially non-fluorescent in solution but when bound by the ligand-binding antibody the detectable signal increases. In this instance a decrease in signal, as opposed to the relieving of quenching, is measured for the presence of a target ligand.

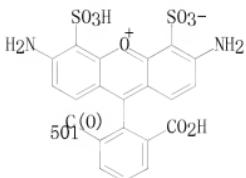
MSTR 1



G3 = 18-13 20-6

^{HN}₁₈—CH₂—CH₂⁰

G4 = 501

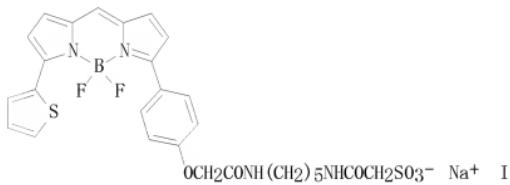


Patent location: claim 1

RE. CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 15 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 143:9187 MARPAT
 TI Preparation of heterocycle or dye compounds containing thiosulfate
 moieties as labeling agents
 IN Haugland, Richard; Kang, Hee Choi
 PA Molecular Probes, Inc., USA
 SO PCT Int. Appl., 64 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005047242	A2	20050526	WO 2004-US36846	20041105
	WO 2005047242	A3	20050818		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 20050250957	A1	20051110	US 2004-982301	20041105	
PRAI US 2003-518151P	20031107				
OS CASREACT	143:9187				
GI					



 $OCH_2CONH(CH_2)_5NHC(OCH_2S_3^-)Na^+ \quad I$

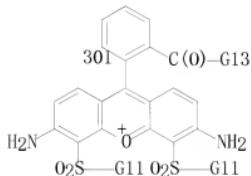
AB The present invention provides compds. containing a thiosulfate group represented by formula R-S-SO₃- or R-S-SO₃H (R = a reporter group, a carrier mol., or a solid support; wherein the reporter group comprises a fluorophore, a phosphorophore, a binding pair member, a polypeptide, a nucleic acid, an enzyme substrate, or a radioisotope tag; the carrier mol. comprises a polypeptide, a protein, a polysaccharide, a carbohydrate, a nucleic acid, a hapten, a psoralen, a drug, a toxin, a hormone, a lipid, a synthetic polymer, a polymeric microparticle, a biol. cell, or a virus), methods for their preparation, and their use for preparing a labeled target analyte. The thiosulfate group reacts with a thiol group to form a disulfide bond. Thus, to a solution of 4,4-difluoro-5,7-dimethyl-4-bora-3a,4a-diaza-s-indacene-3-propionylethylenediamine hydrochloride (358 mg, 1.00 mmol) and

N,N-diisopropylethylamine (200 μ L, 1.16 mmol) in 50 mL methanol was added a solution of 2,3,5,6-tetrafluorophenoxy carbonylmethyl thiosulfate, N,N-diisopropylethylamine salt (530 mg, 1.16 mmol) in 4 mL dry DMF. After being stirred at room temperature for 2 h, the reaction mixture was concentrated in vacuo and the crude product was purified by column chromatog. on silica gel eluting with 10% methanol in chloroform and then converted to sodium form by treating with Dowex 50 WX (sodium form) to give 421 mg of the boradiazaindacene (I) as an orange solid. The compound I showed the absorption maximum at 504 nm in methanol and the emission maximum at 510 nm in methanol. I formed a dye-protein conjugate with a degree of substitution of .apprx.0.20 which released protein by treatment with dithiothreitol.

MSTR 1

G1—G2—S02—G9

G1 = 301



G2 = 7-6 8-3

G3—§

G3 = 24-6 17-8

G5—C(0)22NH—G1020NH—C(0)G5—G4

G5 = (0-5) CH2
G11 = 223

$^{223}_{\text{OH}} \bullet \text{Na}$

Patent location:
Note:

claim 1
also incorporates claim 12

RE. CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 16 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 142:116009 MARPAT
 TI Rhodamine dye derivatives and their use for phase change inks.
 IN Banning, Jeffery H.; Wu, Bo; Duff, James M.; Wedler, Wolfgang G.; Thomas, Jule W., Jr.; Bridgeman, Randall R.
 PA Xerox Corporation, USA
 SO Eur. Pat. Appl., 184 pp.
 CODEN: EPXXDW

DT Patent

LA English

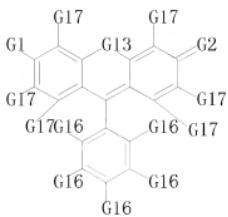
FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1493781	A1	20050105	EP 2004-11834	20040518
	EP 1493781	B1	20060517		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
	US 20050011410	A1	20050120	US 2003-607373	20030626
	US 6998493	B2	20060214		
	CA 2471529	A1	20041226	CA 2004-2471529	20040618
	MX 2004006263	A	20050203	MX 2004-6263	20040624
	CN 1576276	A	20050209	CN 2004-10062052	20040625
	CN 100460403	C	20090211		
	BR 2004002451	A	20050524	BR 2004-2451	20040625
	JP 2005015806	A	20050120	JP 2004-190146	20040628
	US 20050228183	A1	20051013	US 2005-141898	20050601
	US 7301025	B2	20071127		
PRAI	US 2003-607373		20030626		
GI					

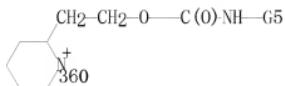
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Organometallic derivs. of rhodamine dyes, such as I is used for phase change and jet-printing inks. A typical composition for phase change inks is prepared by melting together a polyethylene wax, stearyl stearamide wax, tetraamide resin, urethane resin from hydroabetyl alc. and isophorone diisocyanate, isophorone diisocyanate, urethane resin from stearyl isocyanate and glycerol-based alc., antioxidant, I and a secondary colorant (brominated quinizarin derivs.) at 135°, filtering and solidifying at room temperature. The magenta phase change ink thus prepared exhibits a viscosity 10.80 cP at 140°.

MSTR 1



G2 = 360



G13 = 0

G16 = CONH2 (opt. substd.)

G17 = SO3H (opt. substd.)

Patent location: claim 1

Note: additional ring formation also claimed

RE. CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 17 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 142:95970 MARPAT
 TI Phase change inks containing colorant compounds
 IN Wu, Bo; Banning, Jeffrey H.; Duff, James M.; Wedler, Wolfgang G.;
 Titterington, Donald R.

PA Xerox Corporation, USA
 SO Eur. Pat. Appl., 226 pp.
 CODEN: EPXXDW

DT Patent

LA English

FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1491596	A1	20041229	EP 2004-12372	20040525
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
	US 20050016417	A1	20050127	US 2003-606705	20030626
	US 6860931	B2	20050301		
	CA 2472113	A1	20041226	CA 2004-2472113	20040622
	CA 2472113	C	20080415		
	MX 2004006264	A	20050203	MX 2004-6264	20040624
	CN 1611557	A	20050504	CN 2004-10062050	20040625
	CN 100497498	C	20090610		
	JP 2005015809	A	20050120	JP 2004-190286	20040628
	BR 2004002524	A	20050524	BR 2004-2524	20040628

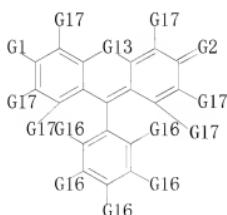
PRAI US 2003-606705 20030626

GI

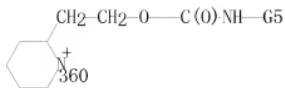
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Phase change inks comprising a carrier and a colorant I or II, wherein R1, R2, R3, R4, R5, R6, R7, a, b, c, d, Y, Q, Q-, A, and CA are as defined herein.

MSTR 1



G2 = 360



G13 = 0
G16 = CONH₂ (opt. substd.)
G17 = SO₃H (opt. substd.)

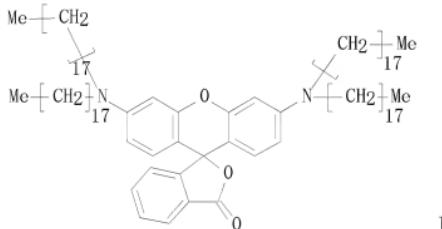
Patent location: claim 1
Note: additional ring formation also claimed

RE. CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 18 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 142:95722 MARPAT
 TI Triphenylmethane analog colorant compounds
 IN Banning, Jeffrey H.; Wu, Bo; Duff, James M.; Wedler, Wolfgang G.;
 Titterington, Donald R.
 PA Xerox Corporation, USA
 SO Eur. Pat. Appl., 231 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN. CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1491590	A1	20041229	EP 2004-14261	20040617
EP 1491590	B1	20080820		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
US 20050011411	A1	20050120	US 2003-607382	20030626
US 7176317	B2	20070213		
CA 2472115	A1	20041226	CA 2004-2472115	20040622
MX 2004006265	A	20050203	MX 2004-6265	20040624
CN 1576278	A	20050209	CN 2004-10062051	20040625
BR 2004002445	A	20050531	BR 2004-2445	20040625
JP 2005015808	A	20050120	JP 2004-190281	20040628

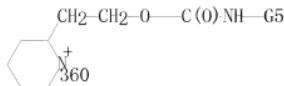
PRAI US 2003-607382 20030626
 GI



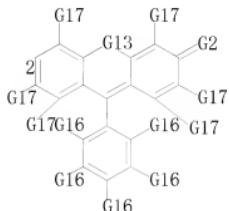
AB Triarylmethane analogs with 1 of the aromatic rings bonded to the central C atom by OCO or OSO₂ bridges in a spiro configuration and/or 2 of the aromatic rings are bridged at positions ortho to the central C atom are useful as dyes for hot-melt inks. A typical dye I was manufactured by chlorination of fluorescein with PCl₅ at 140° in PhCl and reaction of the resulting dichlorofluorescein 10 h at 190° with distearylamine in tetramethylene sulfone in the presence of CaO and ZnCl₂.

MSTR 1

G2 = 360



G13 = 0
 G16 = CONH₂ (opt. substd.)
 G17 = SO₃H (opt. substd.)
 G20 = 2



Patent location:

claim 1

Note: additional ring formation also claimed

RE. CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 19 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 142:95716 MARPAT
 TI Phase change inks containing colorant compounds
 IN Wu, Bo; Banning, Jeffery H.; Duff, James M.; Wedler, Wolfgang G.; Thomas, Jule W., Jr.; Bridgeman, Randall R.
 PA Xerox Corporation, USA
 SO U.S., 72 pp.

CODEN: USXXAM

DT Patent

LA English

FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6835238	B1	20041228	US 2003-606631	20030626
	US 20040261657	A1	20041230		
	EP 1491595	A1	20041229	EP 2004-11823	20040518
	EP 1491595	B1	20070613		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
	CA 2471533	A1	20041226	CA 2004-2471533	20040618
	MX 2004006262	A	20050203	MX 2004-6262	20040624
	CN 1576329	A	20050209	CN 2004-10062047	20040625
	CN 100497497	C	20090610		
	JP 2005015807	A	20050120	JP 2004-190164	20040628
	BR 2004002453	A	20050531	BR 2004-2453	20040628

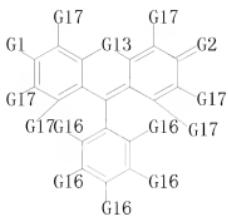
PRAI US 2003-606631 20030626

GI

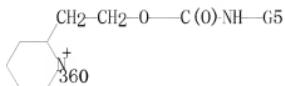
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A phase change ink composition comprises a phase change ink carrier and a colorant compound of the formula I wherein M is either (1) a metal ion having a pos. charge of +y wherein y is an integer which is at least 2, said metal ion being capable of forming a compound with at least 2 II chromogen moieties, or (2) a metal-containing moiety capable of forming a compound with at least 2 II chromogen moieties (in the structures, z = integer representing the number of chromogen moieties associated with the metal and is at least 2; R1, R2, R3, R4 = H, alkyl, aryl group, arylalkyl, alkylaryl group, wherein R1 and R2 and R3 and R4 can be joined together to form a ring, R1, R2, R3, R4 can each be joined to a Ph ring in the central structure; a, b = 0, 1, 2, or 3; c = 0, 1, 2, 3, or 4; R5, R6, R7 = alkyl, aryl, arylalkyl, alkylaryl, halogen, ester, amide, sulfone, amine, ammonium, nitrile, nitro group, etc. wherein R5, R6, and R7 can each be joined to a Ph ring in the central structure; Y = 0, S, substituted N, substituted C with a proviso; Q⁻ = COO⁻, SO₃⁻ group; d = 1-5; A = anion; CA = H, cation associated with all but one of the Q⁻ groups).

MSTR 1



G2 = 360



G13 = 0

G16 = CONH2 (opt. substd.)

G17 = SO3H (opt. substd.)

Patent location: claim 1

Note: additional ring formation also claimed

RE. CNT 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

G1 = S03H
G7 = phenylene (opt. subst. by (1-4) G1)
G8 = NH
G12 = heterocycle <containing 1 heteroatom, 1 N,
 attached through 1 N, saturated> (opt. subst.)

Patent location: claim 1
Note: additional ring formation also claimed
Note: substitution is restricted

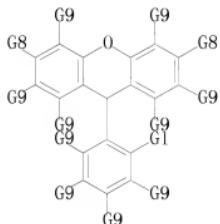
RE. CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 21 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 137:95164 MARPAT
 TI Fluorescent xanthene derivative dyes, their production and their use
 IN Gao, Jianxin; Giese, Roger W.
 PA Northeastern University, USA
 SO PCT Int. Appl., 38 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002055512	A1	20020718	WO 2002-US801	20020110
	W: US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	US 20040054195	A1	20040318	US 2003-250975	20030710
PRAI	US 2001-261710P	20010112			
	WO 2002-US801	20020110			

AB Secondary amide xanthene derivs., termed "xanthamides", and other xanthene derivs., are obtained as fluorescent dyes which can have much higher photostability than related dyes such as fluorescein and BODIPY-FL. Examples are presented in which the synthesis begins with fluoresceins or rhodamines. A diversity of xanthamide and related xanthene dyes can be prepared with a broad variation of physicochem. properties to enhance the usefulness of fluorescence in biol. and chemical anal., and in other areas. Xanthamides can also be used as indicators or quenchers of reactive oxygen or free radical species.

MSTR 1



G1 = 22

$\frac{G_1(0)G_2}{22}$

G2 = NH₂ (opt. substd.)

G8 = NH₂

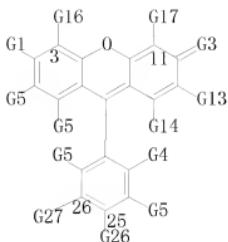
G9 = SO₃H (opt. substd.)

Patent location: claim 1

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 22 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 136:371071 MARPAT
 TI Atropisomers of asymmetric xanthene fluorescent dyes and use in DNA sequencing and fragment analysis
 IN Lee, Linda G.; Taing, Meng C.; Rosemblum, Barnett B.
 PA PE Corporation, USA
 SO PCT Int. Appl., 89 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN. CNT 1

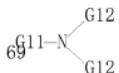
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002036832	A2	20020510	WO 2001-US48654	20011030
	WO 2002036832	A3	20020801		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 6448407	B1	20020910	US 2000-704966	20001101	
CA 2426121	A1	20020510	CA 2001-2426121	20011030	
AU 2002030914	A	20020515	AU 2002-30914	20011030	
EP 1330550	A2	20030730	EP 2001-991171	20011030	
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004532805	T	20041028	JP 2002-539575	20011030	
US 20030055243	A1	20030320	US 2002-227058	20020821	
US 6649769	B2	20031118			
US 20040229235	A1	20041118	US 2003-716165	20031118	
US 7038063	B2	20060502			
US 20060188915	A1	20060824	US 2006-381342	20060502	
US 20070254298	A1	20071101	US 2007-733014	20070409	
PRAI	US 2000-704966	20001101			
	WO 2001-US48654	20011030			
	US 2002-227058	20020821			
	US 2003-716165	20031118			
	US 2006-381342	20060502			
AB	Substantially pure atropisomers of xanthene compds., and use in variety of mol. biol. applications, are disclosed. Use of atropisomeric xanthene fluorescent dyes as labels for substrates such as nucleotides, nucleosides, polynucleotides, polypeptides and carbohydrates, is claimed. Applications include DNA sequencing, DNA fragment anal., PCR, SNP anal., oligonucleotide ligation, amplification, minisequencing, and primer extension. Synthesis of those compds. are described. Sequencing of pGEM with phosphate-linker, energy-transfer terminator ddATP, and ddGTP is described.				



G3 = 29

^{29}NH ● H^+

G5 = 69



G11 = C(0)

G17 = SO3H

Patent location: claim 1

RE. CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 23 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 136:65631 MARPAT
 TI Fluorometric labeling method for screening protoporphyrinogen oxidase
 inhibitors as potential herbicides
 IN Schallner, Otto; Zitzmann, Werner; Tietjen, Klaus-Guenther
 PA Bayer Aktiengesellschaft, Germany; Bayer Cropscience AG
 SO Eur. Pat. Appl., 29 pp.
 CODEN: EPXXDW
 DT Patent
 LA German
 FAN. CNT 1

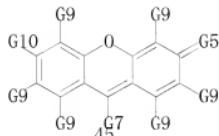
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1170377	A2	20020109	EP 2001-114732	20010622
	EP 1170377	A3	20040211		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	DE 10032633	A1	20020117	DE 2000-10032633	20000705
	US 20020012960	A1	20020131	US 2001-897233	20010702
	JP 2002355094	A	20021210	JP 2001-200694	20010702
PRAI	DE 2000-10032633		20000705		

AB The invention concerns a fluorometric assay that can be used in high throughput screening of herbicides; inhibitors of protoporphyrinogen oxidase (PPO) are fluorescent-labeled and brought in contact with a PPO solution in the presence of potential herbicides that are assumed PPO inhibitors. Plant exts., purified PPO or genetically engineered PPO are used. Thus, 2-(2-aminoethoxy)-4-(4-bromo-5-difluoromethoxy-1-methyl-1H-pyrazol-3-yl)-5-fluorobenzonitrile was synthesized and labeled with fluorescein-5-EX succinimidyl ester and with 5-carboxyfluorescein. The tracers were used in competitive binding reactions for PPO in barley exts. with the unlabeled compound and 5-amino-1-(2,6-dichloro-4-trifluoromethylphenyl)-4-nitro-1H-pyrazole.

MSTR 1

G1—G2—G3

G1 = 45



G2 = 104-3 108-1

$\text{C}_{104}^0-\text{CH}_2-\text{CH}_2-\text{NH}-\text{C}_{108}^0$

G5 = NH
G7 = phenylene (opt. substd. by 1 or more G8)
G9 = SO3H

Patent location: claim 10
Note: substitution is restricted

RE. CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

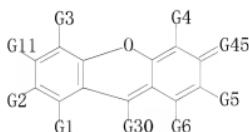
L13 ANSWER 24 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 136:1576 MARPAT
 TI Oligonucleotides labeled with energy transfer acceptors for use in
 amplification, hybridization, and ligation assays employing fluorescent
 nucleic acid stains
 IN Singer, Victoria L.; Haugland, Richard P.
 PA Molecular Probes, Inc., USA
 SO U.S., 25 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6323337	B1	20011127	US 2000-570343	20000512
	GB 2365866	A	20020227	GB 2001-11507	20010511
	GB 2365866	B	20020731		
	CA 2347505	A1	20011112	CA 2001-2347505	20010514

PRAI US 2000-570343 20000512

AB The invention relates to oligonucleotides labeled with an energy transfer acceptor useful in conjunction with fluorescent nucleic acid stains. The resulting oligonucleotides are useful for decreasing background fluorescence during amplification assays and in ligation assays, and for detecting hybridization. Thus, PCR reactions may be conducted with primers labeled with N,N'-diphenylrhodamine and the reaction may be monitored in real time if the fluorescent stain SYBR Green I is included in the reaction mixture. The background fluorescence in reactions containing these quenched primers is lower than that observed in those containing unlabeled primers, and, in addition, primer dimers do not contribute to the product signal.

MSTR 3A



G4 = SO₃H
 G30 = Ph (opt. substd. by 1 or more G41)
 G41 = alkylaminocarbonyl <containing 1-18 C>
 (opt. substd.)
 G45 = 351

N—G12
351

Patent location: claim 38
 Note: or salts
 Note: substitution is restricted
 Note: additional ring formation also claimed

RE. CNT 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

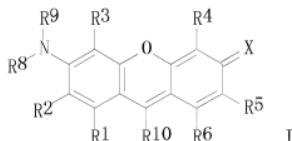
L13 ANSWER 25 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 133:336549 MARPAT
 TI Xanthene dyes and their application as luminescence quenching compounds
 IN Haugland, Richard P.; Singer, Victoria L.; Yue, Stephen T.
 PA Molecular Probes, Inc., USA
 SO PCT Int. Appl., 66 pp.
 CODEN: PIXXD2

DT Patent
 LA English

FAN.CNT 1

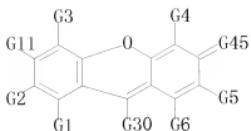
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000064988	A1	20001102	WO 2000-US10740	20000421
	W: AU, CA, JP RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2335359	A1	20001102	CA 2000-2335359	20000421
	CA 2335359	C	20070717		
	EP 1090073	A1	20010411	EP 2000-926217	20000421
	EP 1090073	B1	20030305		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	US 6399392	B1	20020604	US 2000-556464	20000421
	AU 751168	B2	20020808	AU 2000-44781	20000421
	AT 233795	T	20030315	AT 2000-926217	20000421
PRAI	US 1999-130808P		19990423		
	WO 2000-US10740		20000421		

GI

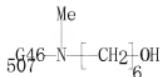


AB The quenching compds. are N-substituted xanthenes that are substituted by ≥ 1 (hetero)aromatic quenching moieties. Chemical reactive quenching compds. of this structure possess utility for labeling a wide variety of substances, including biomols. The labeled substances are useful for a variety of energy-transfer assays and applications. Specifically the quenching compds. have the structure I [R2-R5 = H, F, Cl, Br, I, CN, C1-18 alkyl, C1-18 alkoxy, C02R, S03M; M = H, cation; R = H, cation, C1-6 alkyl; R1, R6 = H or R1R2 and/or R5R6 complete a 6-membered aromatic ring; R8, R9 = H, organic group, or form a 5- or 6-membered ring with each other or with R2 and/or R3, resp.; R10 = H, organic group; X = O, +NR11R12; R11, R12 are defined analogously to R8, R9], in which ≥ 1 of R8-R12 contains a group with fluorescence quenching ability and ≥ 1 of R8-R12 contains a conjugated biol. substance or a group reactive in conjugation with biomols.

MSTR 1A



G4 = SO₃H
 G30 = Ph (opt. substd. by 1 or more G41)
 G41 = 507



G45 = 351

351 — G12

G46 = C(0)
 Patent location: claim 1
 Note: or salts
 Note: substitution is restricted

RE. CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 26 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 133:71117 MARPAT
 TI The synthesis of 4,7-Dichlororhodamine dyes and their use in
 polynucleotide sequencing and fragment analysis
 IN Lee, Linda; Benson, Scott C.; Rosenblum, Barnett B.; Spurgeon, Sandra L.
 PA The Perkin-Elmer Corporation, USA
 SO U.S., 16 pp., Cont.-in-part of U.S. Ser. No. 38,191.
 CODEN: USXXAM

DT Patent

LA English

FAN. CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6080852	A	20000627	US 1999-277793	19990327
	US 5847162	A	19981208	US 1996-672196	19960627
	JP 2003221515	A	20030808	JP 2002-280013	19970521
	US 6025505	A	20000215	US 1998-38191	19980310
	CA 2367868	A1	20001005	CA 2000-2367868	20000324
	CA 2367868	C	20070619		
	WO 2000058406	A1	20001005	WO 2000-US8003	20000324
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1165694	A1	20020102	EP 2000-916662	20000324
	EP 1165694	B1	20040922		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2002540280	T	20021126	JP 2000-608692	20000324
	JP 3848838	B2	20061122		
	EP 1386946	A1	20040204	EP 2003-25777	20000324
	EP 1386946	B1	20090805		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
	AU 772329	B2	20040422	AU 2000-37732	20000324
	AT 277128	T	20041015	AT 2000-916662	20000324
	ES 2226801	T3	20050401	ES 2000-916662	20000324
	AT 438691	T	20090815	AT 2003-25777	20000324
	ES 2329562	T3	20091127	ES 2003-25777	20000324
	US 6713622	B1	20040330	US 2000-578920	20000525
	US 20050112781	A1	20050526	US 2004-788660	20040226
	US 7550570	B2	20090623		
	JP 2004305217	A	20041104	JP 2004-152623	20040521
	JP 2006151973	A	20060615	JP 2005-321635	20051104
	US 20090093623	A1	20090409	US 2008-199441	20080827
	JP 2009073838	A	20090409	JP 2008-249238	20080926
PRAI	US 1996-672196		19960627		
	US 1998-38191		19980310		
	JP 1998-502974		19970521		
	JP 2002-280013		19970521		
	US 1999-277793		19990327		
	EP 2000-916662		20000324		
	JP 2000-608692		20000324		

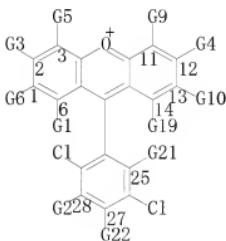
WO 2000-US8003 20000324
 US 2000-578920 20000525
 US 2004-788660 20040226

GI

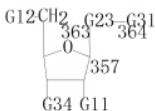
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A set of 4,7-dichlororhodamine compds. useful as fluorescent dyes are disclosed having the structures (I) and (II); wherein R1 -R6 are hydrogen, fluorine, chlorine, lower alkyl, lower alkene, lower alkyne, sulfonate, sulfone, amino, amido, nitrite, lower alkoxy, linking group, or, when taken together, R1 and R6 is benzo, or, when taken together, R4 and R5 is benzo; R7 -R10, R12 -R16 and R18 may be hydrogen, fluorine, chlorine, lower alkyl, lower alkyne, lower alkoxy, linking group; R11 and R17 may be hydrogen, lower alkyl, lower alkene, lower alkyne, Ph, aryl, linking group; Y1 -Y4 are hydrogen, lower alkyl, or cycloalkyl, or, when taken together, Y1 and R2, Y2 and R1 Y3 and R3, and/or Y4 and R4 is propano, ethano, or substituted forms thereof, and X1 -X3 taken sep. are hydrogen, chlorine, fluorine, lower alkyl, carboxylate, sulfonate, hydroxymethyl, and linking group, or any combinations thereof. In another aspect, the invention includes reagents labeled with the 4,7-dichlororhodamine dye compds., including deoxynucleotides, dideoxynucleotides, and polynucleotides. In an addnl. aspect, the invention includes methods utilizing such dye compds. and reagents including dideoxy polynucleotide sequencing and fragment anal. methods.

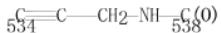
MSTR 1



G4 = pyrrolidino
 G9 = sulfonate
 G21 = 364



G31 = 534-363 538-25



Patent location:

claim 1

Note:

additional ring formation also claimed

Note:

also incorporates claims 16 and 22

Note:

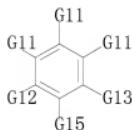
substitution is restricted

RE. CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

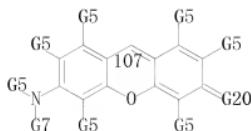
L13 ANSWER 27 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 132:23862 MARPAT
 TI Fluorescent rhodamine dye derivatives and their use in diagnostic systems
 IN Josel, Hans-Peter; Herrmann, Rupert; Heindl, Dieter; Muehlegger, Klaus;
 Sagner, Gregor; Drexhage, Karl Heinz; Frantzeskos, Jorg; Arden-Jacob,
 Jutta
 PA Roche Diagnostics G.m.b.H., Germany
 SO Eur. Pat. Appl., 21 pp.
 CODEN: EPXXDW
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 962497	A1	19991208	EP 1999-110226	19990526
	EP 962497	B1	20010718		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	DE 19824535	A1	19991209	DE 1998-19824535	19980603
	AT 203260	T	20010815	AT 1999-110226	19990526
	US 6184379	B1	20010206	US 1999-324265	19990602
	JP 2000044823	A	20000215	JP 1999-157177	19990603
PRAI	DE 1998-19824535		19980603		
AB	Fluorescent xanthium and 6-phenyl-10,11-dihydro-2H-13-oxa-11-aza-1-azoniapentacene derivs. form conjugates with biomols. and are used in labeling and diagnostic systems, especially with oligonucleotides, by using fluorescence resonance energy transfer. In an example, 2-(2,2,4-trimethyl-7-methoxy-1,2-dihydro-1-quinolyl)ethyl acetate and 6-(2-carboxy-3,4,5,6-tetrachlorobenzoyl)-1,2-dihydro-1-ethyl-7-hydroxy-2,2,4-trimethylquinoline were cyclocondensed to give 1-(2-hydroxyethyl)-6-(2,3,4,5-tetrachlorophenyl)-11-ethyl-2,2,4,8,10,11-hexamethyl-10,11-dihydro-2H-13-oxa-11-aza-1-azoniapentacene perchlorate. A phosphoramidite derivative was then prepared for use in oligonucleotide marking.				

MSTR 1



G5 = SO3H
 G13 = CONH2
 G15 = 107



G20 = 136

^{NH}₁₃₆ ● H⁺

Patent location:

claim 1

Note:

substitution is restricted

Note:

additional ring formation also claimed

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 28 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 131:166214 MARPAT
 TI Energy transfer dyes with enhanced fluorescence, reagents containing them,
 and their use in nucleic acid sequencing
 IN Lee, Linda G.; Spurgeon, Sandra L.; Rosenblum, Barnett
 PA Perkin-Elmer Corporation, USA
 SO U.S., 77 pp., Cont.-in-part of U.S. 5,863,727.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN. CNT 6

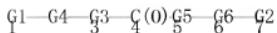
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5945526	A	19990831	US 1998-46203	19980323
	US 5863727	A	19990126	US 1996-642330	19960503
	US 5847162	A	19981208	US 1996-672196	19960627
	JP 2003221515	A	20030808	JP 2002-280013	19970521
	US 6335440	B1	20020101	US 1999-272097	19990318
	US 20020086985	A1	20020704	US 2001-14743	20011029
	US 6849745	B2	20050201		
	US 20050069912	A1	20050331	US 2004-788836	20040226
	US 7169939	B2	20070130		
	US 20050112781	A1	20050526	US 2004-788660	20040226
	US 7550570	B2	20090623		
	JP 2004305217	A	20041104	JP 2004-152623	20040521
	US 20070154924	A1	20070705	US 2006-617667	20061228
	US 7423140	B2	20080909		
	US 20070161026	A1	20070712	US 2006-617660	20061228
	US 7399854	B2	20080715		
	US 20070161027	A1	20070712	US 2006-617665	20061228
	US 7388092	B2	20080617		
	US 20070154925	A1	20070705	US 2006-618679	20061229
	US 7449298	B2	20081111		
	US 20070154926	A1	20070705	US 2006-618683	20061229
	US 7452672	B2	20081118		
	US 20070154927	A1	20070705	US 2006-618693	20061229
	US 20070207477	A1	20070906	US 2006-618688	20061229
	US 7449149	B2	20081111		
	US 20070212709	A1	20070913	US 2006-618663	20061229
	US 7432058	B2	20081007		
	US 20080268509	A1	20081030	US 2006-618667	20061229
	US 7595162	B2	20090929		
	US 20090118485	A1	20090507	US 2008-205817	20080905
	JP 2009073838	A	20090409	JP 2008-249238	20080926

PRAI	US 1996-642330	19960503
	US 1996-672196	19960627
	US 1996-726462	19961004
	JP 1998-502974	19970521
	JP 2002-280013	19970521
	US 1998-46203	19980323
	US 1999-272097	19990318
	US 2000-578920	20000525
	US 2001-14743	20011029
	US 2004-788836	20040226
	US 2006-617667	20061228

AB Novel linkers for linking a donor dye to an acceptor dye in an energy transfer fluorescent dye are provided. These linkers facilitate the

efficient transfer of energy between a donor and acceptor dye in an energy transfer dye. One of these linkers for linking a donor dye to an acceptor dye in an energy transfer fluorescent dye has the general structure R21ZCOR2R3 (R1=C1-5 alkyl attached to the donor dye; Z=NH, S, O; R2=alkene, diene, alkyne, 5-6-membered ring having at least one unsatd. bond or fused ring structure which is attached to the carbonyl carbon; R3=functional group which attaches the linker to the acceptor dye). A preferred linker is CH2NHCOC6H4CH2NHC0. Thus, 9-(2,4-dicarboxyphenyl)-3,6-bis(dimethylamino)xanthylum was esterified (4-CO2H) with N-hydroxysuccinimide (I), condensed with 4-H2NCH2C6H4CO2H, re-esterified with I, and condensed with 4'-(aminomethyl)-5-carboxyfluorescein to give an energy transfer dye (II), esterification of which with I provided a site for coupling to a nucleoside. In DNA sequencing, an oligonucleotide labeled with II was brighter than one labeled with the direct amide of the resp. carboxyrhodamine and (aminomethyl)fluorescein not containing a spacer bridge.

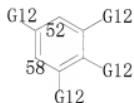
MSTR 1



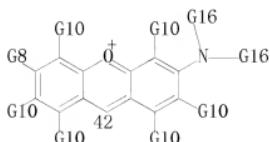
G2 = 61

G13-G14
61-125

G10 = SO3H
G12 = CONH2 (opt. substd.)
G13 = 58-6 52-125



G14 = 42



Patent location:

Note:

claim 1

additional ring formation and linker-, donor-, or acceptor-containing moieties and dimers also claimed

RE. CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 29 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 130-264438 MARPAT
 TI Sulfonated xanthene derivatives synthesis and applications as fluorescent stains

IN Mao, Fei; Leung, Wai-Yee; Haugland, Richard P.

PA Molecular Probes, Inc., USA

SO PCT Int. Appl., 63 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN. CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9915517	A1	19990401	WO 1998-US19921	19980923
	W: AU, CA, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 6130101	A	20001010	US 1997-935963	19970923
	CA 2272403	A1	19990401	CA 1998-2272403	19980923
	AU 9895046	A	19990412	AU 1998-95046	19980923
	AU 750380	B2	20020718		
	EP 966458	A1	19991229	EP 1998-948483	19980923
	EP 966458	B1	20030813		
	R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, IE				
	JP 20011508494	T	20010626	JP 1999-519270	19980923
	AT 247098	T	20030815	AT 1998-948483	19980923
	WO 2000017650	A1	20000330	WO 1999-US22193	19990923
	W: AU, CA, JP				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9964002	A	20000410	AU 1999-64002	19990923
PRAI	US 1997-935963	19970923			
	WO 1998-US19921	19980923			
	US 1998-209045	19981209			
	WO 1999-US22193	19990923			

AB The present invention describes xanthene dyes, including rhodamines, rhodols and fluoresceins that are substituted one or more times by a sulfonic acid or a salt of a sulfonic acid. The dyes of the invention, including chemical reactive dyes and dye-conjugates are useful as fluorescent probes, particularly in biol. samples.

MSTR 1

G19-G28

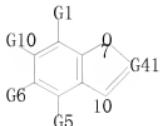
G1 = SO₃H
 G16 = 49



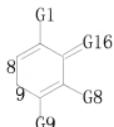
G19 = Ph (opt. substd. by 1 or more G21)
G21 = 106

$\frac{C(0)}{106}$ G26-G24

G26 = NH
G28 = 10



G41 = 8-7 9-10



Derivative: or salts or modified derivatives
Patent location: claim 1
Note: substitution is restricted

RE CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 30 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 129:212480 MARPAT
 TI Energy transfer dyes with enhanced fluorescence
 IN Lee, Linda G.; Spurgeon, Sandra L.; Rosenblum, Barnett
 PA The Perkin Elmer Corp., USA
 SO U.S., 83 pp., Cont.-in-part of U. S. Ser. No. 642,330.
 CODEN: USXXAM

DT Patent

LA English

FAN. CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5800996	A	19980901	US 1996-726462	19961004
	US 5863727	A	19990126	US 1996-642330	19960503
	US 5847162	A	19981208	US 1996-672196	19960627
	CA 2203494	A1	19971103	CA 1997-2203494	19970423
	CA 2203494	C	20001226		
	CA 2297589	A1	19971103	CA 1997-2297589	19970423
	EP 805190	A2	19971105	EP 1997-303039	19970502
	EP 805190	A3	19980107		
	EP 805190	B1	19991215		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	AU 9719995	A	19971120	AU 1997-19995	19970502
	AU 691143	B2	19980507		
	EP 940450	A1	19990908	EP 1999-201120	19970502
	EP 940450	B1	20060802		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	AT 187752	T	20000115	AT 1997-303039	19970502
	AT 335051	T	20060815	AT 1999-201120	19970502
	JP 10088124	A	19980407	JP 1997-115920	19970506
	JP 3090626	B2	20000925		
	JP 2000154381	A	20000606	JP 2000-10931	19970506
	JP 2000187036	A	20000704	JP 2000-10932	19970506
	JP 2003274999	A	20030930	JP 2003-28821	19970506
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	JP 2003221515	A	20030808	JP 2002-280013	19970521
	US 6335440	B1	20020101	US 1999-272097	19990318
	JP 2000154332	A	20000606	JP 2000-10933	20000119
	JP 3592173	B2	20041124		
	US 20020086985	A1	20020704	US 2001-14743	20011029
	US 6849745	B2	20050201		
	JP 2004043819	A	20040212	JP 2003-288285	20030806
	JP 2004068023	A	20040304	JP 2003-288286	20030806
	US 20050069912	A1	20050331	US 2004-788836	20040226
	US 7169939	B2	20070130		
	US 20050112781	A1	20050526	US 2004-788660	20040226
	US 7550570	B2	20090623		
	JP 2004250713	A	20040909	JP 2004-136932	20040430
	JP 2004305217	A	20041104	JP 2004-152623	20040521
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	US 7423140	B2	20080909		
	US 20070161026	A1	20070712	US 2006-617660	20061228
	US 7399854	B2	20080715		
	US 20070161027	A1	20070712	US 2006-617665	20061228
	US 7388092	B2	20080617		

US	20070154925	A1	20070705	US	2006-618679	20061229
US	7449298	B2	20081111			
US	20070154926	A1	20070705	US	2006-618683	20061229
US	7452672	B2	20081118			
US	20070154927	A1	20070705	US	2006-618693	20061229
US	20070207477	A1	20070906	US	2006-618688	20061229
US	7449149	B2	20081111			
US	20070212709	A1	20070913	US	2006-618663	20061229
US	7432058	B2	20081007			
US	20080268509	A1	20081030	US	2006-618667	20061229
US	7595162	B2	20090929			
US	20090118485	A1	20090507	US	2008-205817	20080905
JP	2009046685	A	20090305	JP	2008-241854	20080919
JP	2009073838	A	20090409	JP	2008-249238	20080926
PRAI	US 1996-642330	19960503				
	US 1996-672196	19960627				
	US 1996-726462	19961004				
	CA 1997-2203494	19970423				
	EP 1997-303039	19970502				
	JP 1997-115920	19970506				
	JP 2000-10931	19970506				
	JP 2000-10932	19970506				
	JP 1998-502974	19970521				
	JP 2002-280013	19970521				
	US 1998-46203	19980323				
	US 1999-272097	19990318				
	US 2000-578920	20000525				
	US 2001-14743	20011029				
	JP 2003-288285	20030806				
	US 2004-788836	20040226				
	US 2006-617667	20061228				

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

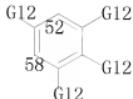
AB Novel linkers for linking a donor dye to an acceptor dye in an energy transfer fluorescent dye are provided. These linkers facilitate the efficient transfer of energy between a donor and acceptor dye in an energy transfer dye. One of these linkers for linking a donor dye to an acceptor dye in an energy transfer fluorescent dye has the general structure R21Z1C(0)R22R28 where R21 is a C1-5 alkyl attached to the donor dye, C(0) is a carbonyl group, Z1 is either NH, S or O, R22 is a substituent which includes an alkene, diene, alkyne, a five and six membered ring having at least one unsatd. bond or a fused ring structure which is attached to the carbonyl carbon, and R28 includes a functional group which attaches the linker to the acceptor dye. One example dye prepared was I.

MSTR 1G1—G4—G3—₄C(0)₅G5—G6—₇G2

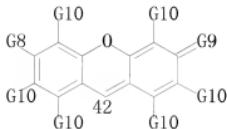
G2 = 61

$^{61}_{61} \text{G}^{13} \text{G}^{14} \text{G}^{13} \text{G}^{14}$

G9 = NH (opt. substd.)
G10 = SO3H
G12 = CONH2 (opt. substd.)
G13 = 58-6 52-125



G14 = 42



Patent location:

claim 1

Note: additional ring formation also claimed

RE. CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 31 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 128:103381 MARPAT
 TI 4,7-Dichlororhodamine dyes, nucleotides labeled therewith, and nucleotide sequencing method
 IN Lee, Linda; Benson, Scott C.; Rosenblum, Barnett B.; Spungeon, Sandra L.
 PA Perkin-Elmer Corp., USA
 SO PCT Int. Appl., 60 pp.
 CODEN: PIXXD2

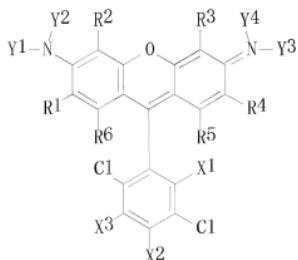
DT Patent

LA English

FAN.CNT 6

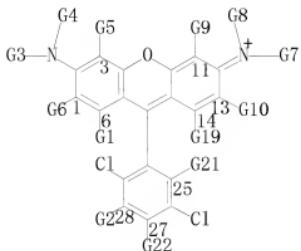
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9749769	A1	19971231	WO 1997-US8797	19970521
	W: AU, CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5847162	A	19981208	US 1996-672196	19960627
	CA 2258243	A1	19971231	CA 1997-2258243	19970521
	CA 2258243	C	20071113		
	AU 9732855	A	19980114	AU 1997-32855	19970521
	AU 709209	B2	19990826		
	EP 915935	A1	19990519	EP 1997-928653	19970521
	EP 915935	B1	20010307		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2000505503	T	20000509	JP 1998-502974	19970521
	JP 4140976	B2	20080827		
	AT 199563	T	20010315	AT 1997-928653	19970521
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	US 20050112781	A1	20050526	US 2004-788660	20040226
	US 7550570	B2	20090623		
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	JP 2009073838	A	20090409	JP 2008-249238	20080926
PRAI	US 1996-672196		19960627		
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	JP 2002-280013		19970521		
	WO 1997-US8797		19970521		
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GI

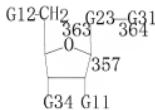


AB The 4,7-dichlororhodamine compds., useful as fluorescent dyes, have the structure I [R1-R6 = H, F, Cl, lower alkyl, lower alkenyl, lower alkynyl, SO3H, sulfonyl, amino, amido, CN, lower alkoxy, linking group, or R1R6, R4R5 = benzo; Y1-Y4 = H, lower alkyl, or Y1R2 = Y2R1 = (CH2)3 or Y3R3 = Y4R4 = (CH2)3; X1-X3 = H, Cl, F, lower alkyl, CO2H, SO3H, CH2OH, linking group]. Thus, a mixture of 2.3 mmol 3-aminophenol, 1.3 mmol 3,6-dichlorotrimellitic anhydride, and 1 mL H2SO4 was heated 12 h at 190° and diluted with water to precipitate a black solid, which was extracted with MeCN and the extract worked up to give 32 mg I (R1-R6 = Y1-Y4 = H; X1 = CO2H; X2, X3 = H, CO2H), λ_{max} 516 nm. This and other I were used to label nucleotides by standard methods. The reduced width of the emission spectral peaks for the I with respect to known rhodamine dyes without 4,7-dichloro substitution result in an increased ability to perform multicomponent anal. when multiple spatially overlapping species are to be detected.

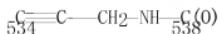
MSTR 1A



G9 = SO3H
 G21 = 364



G31 = 534-363 538-25



Patent location:

claim 1
 Note: additional ring formation also claimed
 Note: also incorporates claims 16 and 22
 Note: substitution is restricted

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 32 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 128:14127 MARPAT
 TI Energy transfer dyes with enhanced fluorescence, reagents containing them, and their use in nucleic acid sequencing

IN Lee, Linda G.; Spurgeon, Sandra L.; Rosenblum, Barnett
 PA Perkin-Elmer Corporation, USA
 SO Eur. Pat. Appl., 79 pp.

CODEN: EPXXDW

DT Patent

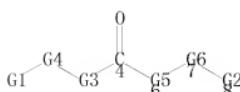
LA English

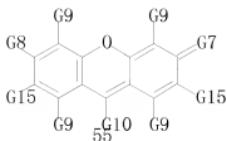
FAN.CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 805190	A2	19971105	EP 1997-303039	19970502
	EP 805190	A3	19980107		
	EP 805190	B1	19991215		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 5863727	A	19990126	US 1996-642330	19960503
	US 5800996	A	19980901	US 1996-726462	19961004
	EP 940450	A1	19990908	EP 1999-201120	19970502
	EP 940450	B1	20060802		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 20050112781	A1	20050526	US 2004-788660	20040226
	US 7550570	B2	20090623		
PRAI	US 1996-642330		19960503		
	US 1996-726462		19961004		
	US 1996-672196		19960627		
	EP 1997-303039		19970502		
	US 2000-578920		20000525		

AB An energy transfer fluorescent dye comprises a donor dye and an acceptor dye linked by a bridge of specified structure containing an amide, ester, or thio ester group. The linkers facilitate the efficient transfer of energy between a donor and acceptor dye in an energy transfer dye. One link specifically claimed is $\text{CH}_2\text{NHCOC}_6\text{H}_4\text{CH}_2\text{NHC}_0$. Thus, 9-(2,4-dicarboxyphenyl)-3,6-bis(dimethylamino)xanthylum was esterified (4-CO₂H) with N-hydroxysuccinimide (I), condensed with 4-H₂NCH₂C₆H₄CO₂H, re-esterified with I, and condensed with 4'-(aminomethyl)-5-carboxyfluorescein to give an energy transfer dye (II), esterification of which with I provided a site for coupling to a nucleoside. In DNA sequencing, an oligonucleotide labeled with II was brighter than one labeled with the direct amide of the resp. carboxyrhodamine and (aminomethyl)fluorescein not containing a spacer bridge.

MSTR 1





G7 = NH (opt. substd.)

G9 = SO3H

G10 = m-C6H4 (opt. substd. by (1-4) G11)

G11 = CONH2

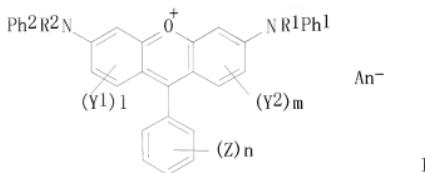
Patent location:

claim 1

Note: additional ring formation also claimed

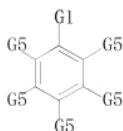
L13 ANSWER 33 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 127:308529 MARPAT
 TI Xanthene dyes and ink-jet recording liquids containing them
 IN Ninomya, Hidetaka; Oya, Hidenobu; Onodera, Akira; Morimoto, Hitoshi;
 Ishibashi, Daisuke
 PA Konica Co., Japan
 SO Jpn. Kokai Tokkyo Koho, 16 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09255882	A	19970930	JP 1996-65758	19960322
PRAI	JP 1996-65758		19960322		
GI					

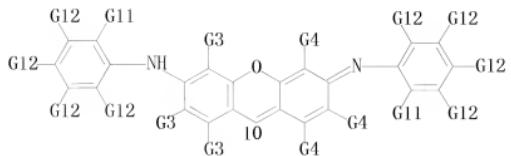


I

AB Title liqs., which show good color tone and color image fastness, contain xanthene dyes I [(R1, R2) = (H, H), (C \geq 2 alkyl, C \geq 2 alkyl); Ph1, Ph2 = o-alkylphenyl derivative; Y1, Y2 = sulfo, halo; Z = sulfo, carboxyl, sulfamoyl, carbamoyl, alkoxy carbonyl, halo; An $^-$ = anion; 1, m = 0, 1, 2; n = 1-5]. Thus, 20 g 3',6'-dichlorofluoran was treated with 31 g o-Me2CHC6H4NH2 in the presence of ZnCl2 at 140-160° for 2 h to give 23 g product, 20 g of which was sulfonated by fuming H2SO4 at \leq 30° to give 15 g I [R1 = R2 = H, Ph1 = o-C6H4CHMe2, Y2 = 2-isopropyl-4-sodiumsulfophenyl, Y1 = Y2 = H, (Z)n = 2-CO2-], 1.4 part of which was mixed with diethylene glycol 19.0, triethylene glycol monobutyl ether 9.0, surfactant 0.6, and H2O 70.0 parts to give an ink-jet recording liquid, which showed light resistance and gave magenta image with good color tone.

MSTR 1

G1 = 10



G4 = SO₃H
 G5 = CONH₂

65 - CONN

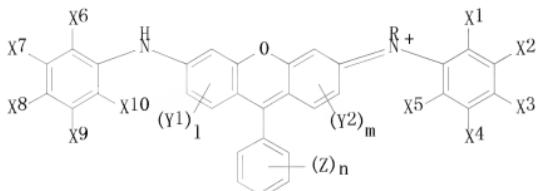
Patch Note:

claim 1
substitution is restricted

L13 ANSWER 34 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 127:249517 MARPAT
 TI Ink-jet inks for lightfast magenta images with good color reproducibility
 IN Ninomya, Hidetaka; Oya, Hidenobu; Onodera, Akira; Morimoto, Hitoshi;
 Ishibashi, Daisuke
 PA Konica Co., Japan
 SO Jpn. Kokai Tokkyo Koho, 23 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN. CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09241553	A	19970916	JP 1996-51377	19960308
JP 3743052	B2	20060208		
JP 1996-51377		19960308		

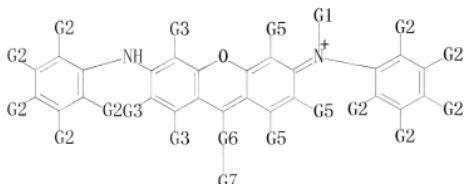
PRAI GI



I

AB The title inks contain dyes I (R = alkyl, alkenyl, aralkyl, carboxyalkyl; X1-10 = H, alkyl, alkenyl, acylamino, alkylsulfonyl, aralkyl, hydroxyalkyl, acyl, amino, cyano, OH, sulfo, carboxy; Y1, Y2 = sulfo, halogen; Z = sulfo, carboxy, sulfamoyl, carbamoyl, alkoxy carbonyl, halogen; 1, m = 0-2; n = 1-5; An- = counter ion not needed in the cases of inner salt), e.g., I (Z = 2-SO3-, 4-SO3Na; R = X1 = X6 = R10 = Me; others = H).

MSTR 1



G5 = SO3H
 G6 = phenylene (opt. substd. by 1 or more G7)
 G7 = 47

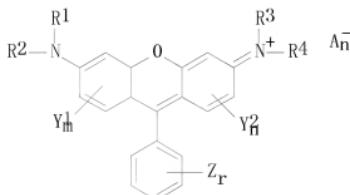
⁶⁸₄₇—NH—G10

68 = C(0)
Patent location:
Note:

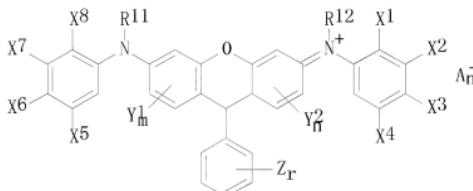
claim 1
substitution is restricted

L13 ANSWER 35 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 127:19739 MARPAT
 TI Ink-jet recording solutions with excellent color tones and light
 resistance
 IN Ninomiya, Hidetaka; Oya, Hidenobu; Onodera, Akira; Ishibashi, Daisuke
 PA Konica Co., Japan
 SO Jpn. Kokai Tokkyo Koho, 17 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN. CNT 1

PATENT NO.		KIND	DATE	APPLICATION NO.		DATE
PI JP 09087534		A	19970331	JP 1995-246112		19950925
PRAI JP 1995-246112			19950925			
GI						



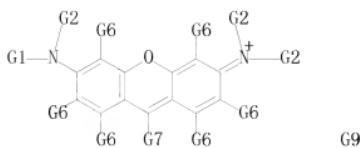
I



III

AB Title recording solns. contain phenylxanthene derivs. (I) or (II) [R1-4 =
 substituted aliphatic groups; Y1, Y2, Z = monovalent groups; m, n = 0-3; r =
 0-5; An- = anion; R11, R12 = (un)substituted aliphatic groups; X1-8 =
 un(substituted) alkyl, alkoxy, acylamino, alkylsulfonylamino,
 alkylsulfonyl, carboxyl, sulfo, halo, H]. Thus, a jet-printing ink
 comprising phenylxanthene derivative (III) 3, diethylene glycol 10,
 triethylene glycol monobutyl ether 7, 1-propanol 3, and H2O 78 parts
 showed good weather resistance and color tone.

MSTR 1

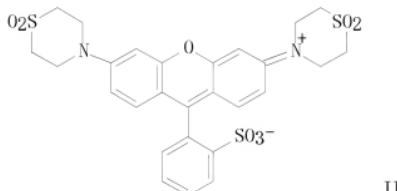
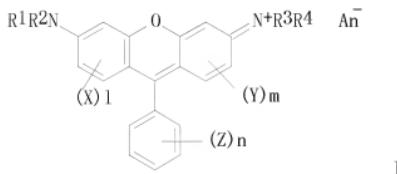


G6 = SO₃H
G7 = Ph (opt. subst. by 1 or more G8)
G8 = CONH₂

Patent location: claim 1

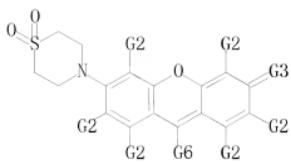
L13 ANSWER 36 OF 36 MARPAT COPYRIGHT 2010 ACS on STN
 AN 127:6210 MARPAT
 TI Magenta ink-jet recording liquids
 IN Onodera, Akira; Ninomya, Hidetaka; Oya, Hidenobu; Ishibashi, Daisuke
 PA Konica Co., Japan
 SO Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN. CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09071741	A	19970318	JP 1995-230275	19950907
PRAI JP 1995-230275		19950907		
GI				

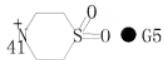


AB The ink-jet printing liqs. contain magenta dyes I (R1-4 = aliphatic, aromatic, H; X, Y, Z = substituent; l, m = 0-3; n = 0-5; A⁻ = counter anion which does not need when counter anion exists in substituent in the mol; NR1R2 and/or NR3R4 is 1,1-dioxido-4-morpholinyl). The inks give light-resistant images. Thus, an ink contained II.

MSTR 1A



G2 = SO₃H
G3 = 41



G6 = Ph (opt. substd. by 1 or more G9)
G9 = CONH₂

Patent location: claim 1

=> d his full

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L1 STRUCTURE uploaded

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D SCA

L3 77 SEA SSS FUL L1

D QUE L3 STAT

L4 58 SEA ABB=ON PLU=ON L3 AND CAPLUS/LC

L5 19 SEA ABB=ON PLU=ON L3 NOT L4

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DICTIONARY FILE UPDATES: 3 JAN 2010 HIGHEST RN 1200115-43-0

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FILE LAST UPDATED: 3 Jan 2010 (20100103/ED)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2009

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2009

Cplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

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FILE MARPAT

FILE CONTENT: 1961-PRESENT VOL 151 ISS 23 (20100101/ED)

MARPAT RECORDS ARE DERIVED FROM INPI DATA FOR 1961-1987

MOST RECENT CITATIONS FOR PATENTS FROM MAJOR ISSUING AGENCIES (COVERAGE TO THESE DATES IS NOT COMPLETE):

US	20090286693	19 NOV 2009
DE	102008022788	12 NOV 2009
EP	2116247	11 NOV 2009
JP	2009280512	03 DEC 2009
WO	2009142969	26 NOV 2009
GB	2459133	14 OCT 2009
FR	2930247	23 OCT 2009
RU	2373213	20 NOV 2009
CA	2638573	30 OCT 2009

The new MARPAT User Guide is now available at:

<http://www.cas.org/support/stngen/stndoc/marpat.html>.

=> log h

COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE

ENTRY

334.43

TOTAL

SESSION

884.64

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-28.80	-44.10

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 09:16:34 ON 04 JAN 2010